The Grin Without the Cat
Claims for Damages From Toxic Exposure Without Present Injury

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A Thesis submitted to
The Faculty of
The National Law Center
of George Washington University
in partial satisfaction of the requirement
for the Degree of Master of Laws

July 6, 1993

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**REPORT DOCUMENTATION PAGE**

1. **AGENCY USE ONLY (Leave blank):**

2. **REPORT DATE:**

3. **REPORT TYPE AND DATES COVERED:**

4. **TITLE AND SUBTITLE:**
   The Thin Without a Cat: Claims for Damage from Toxic Exposure Without Present Injury

5. **FUNDING NUMBERS:**

6. **AUTHOR(S):**
   Bill C. Wells

7. **PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES):**
   AFIT Student Attending: George Washington Univ

8. **PERFORMING ORGANIZATION REPORT NUMBER:**
   AFIT/CI/CIA-92-1173

9. **SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES):**
   DEPARTMENT OF THE AIR FORCE
   AFIT/CI
   2950 P STREET
   WRIGHT-PATTERSON AFB OH 45433-7765

10. **SPONSORING/MONITORING AGENCY REPORT NUMBER:**

11. **SUPPLEMENTARY NOTES:**

12a. **DISTRIBUTION/AVAILABILITY STATEMENT:**
   Approved for Public Release IAW 190-1
   Distribution Unlimited
   MICHAEL M. BRICKER, SMSgt, USAF
   Chief Administration

12b. **DISTRIBUTION CODE:**

13. **ABSTRACT (Maximum 200 words):**

14. **SUBJECT TERMS:**

15. **NUMBER OF PAGES:**

16. **PRICE CODE:**

17. **SECURITY CLASSIFICATION OF REPORT:**

18. **SECURITY CLASSIFICATION OF THIS PAGE:**

19. **SECURITY CLASSIFICATION OF ABSTRACT:**

20. **LIMITATION OF ABSTRACT:**

NSN 7540-01-280-5500

Form Approved
OMB No 0704-0188

Prescribed by ARMY Std 239-18
298 122
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CHAPTER 1
INTRODUCTION AND OVERVIEW

Toxic tort litigation has, in the last several years, moved in the direction of attempting to gain damages in cases where neither impact nor present injury can be shown.¹ Non-injury damage claims are called medical monitoring², increased or enhanced risk of disease (frequently cancer) and emotional distress. The claims for emotional distress include claims for psychological injury from the awareness of exposure and the alleged increased risk of the disease. Emotional distress³ due to fear of cancer is sometimes called "cancerphobia."⁴

These damage theories are tied together by a lack of current physical injury that can be shown to have been caused by exposure to the chemical or


² The terms "medical surveillance," "diagnostic testing", "preventive monitoring" and "medical monitoring" are used interchangeably by the courts and commentators. They all represent the general process through which medical testing protocols are funded for the alleged or potential victims of exposure to toxic substances. See, Allan T. Slagel, Medical Surveillance Damages: A Solution to the Inadequate Compensation of Toxic Tort Victims, 63 Ind. L. J. 849 (1988). Medical monitoring will be the form used here.

³ What will be considered here is emotional distress as an element of damages in negligence or strict liability, or in some jurisdictions the independent tort of negligent infliction of emotional distress. The intentional infliction of emotional distress raises different issues (mostly related to fraud) that are beyond the scope of this thesis.

⁴ Realizing that some courts draw a distinction between claims that are based on just a "simple fear" of developing a disease (and which do not require expert testimony to support the claim) and claims that the plaintiff's distress amounts to a phobia (and which does require that the claim be supported by expert testimony). See, Eagle-Picher Industries Inc. v. Cox, 481 So.2d 517,526 (Fla. App. 3 Dist. 1985); Devlin v. Johns-Manville Sales Corp., 495 A.2d 495, 499 (Law Div. 1985).
chemicals in question.\textsuperscript{5} It is difficult to prove that a particular injury is caused by being exposed to a small dose of any particular chemical. It is even more difficult to prove that a specific level of exposure will cause future injury.\textsuperscript{6}

These so called "non impact damages" are an attempt to avoid the necessity of proving causation by doing away with the need to prove injury.\textsuperscript{7} With apologies to Lewis Carrol, this presents the question of whether there can be the grin, without the bother and inconvenience of the cat?\textsuperscript{8} My intention in this thesis is to survey the general area of claims for common law tort damages without present injury due to toxic exposure as it has


\textsuperscript{6} David Rosenberg, The Causal Connection in Mass Exposure Cases: A "Public Law" Vision of the Tort System, 97 Harv. L. Rev. 851, 851 n.2 (1984); Cottle v. Superior Court (Oxnard Shores Company, et al. real party in interest) Cal. Rptr.2d 882 (1992), Johnson, J, dissenting. See Also, American Law Institute, Enterprise Responsibility for Personal Injuries, Vol. 1, p. 321, where the authors ask why the number of toxic tort actions was comparatively small and stated that this was because"environmental tort cases are difficult to win."

\textsuperscript{7} See, D. Alan Rudlin and Linsey W. Stravitz, Novel Tort and Superfund Claims, Practicing Law Institute, 1991; and Comment, "Close Encounters of the Toxic Kind" -- Toward an Amelioration of Substantive and Procedural Barriers for Latent Toxic Injury Plaintiffs, 54 Temp. L.Q. 822, 853 (1983) (concluding it is so expensive to prove proximate cause in toxic tort cases that only government entities can afford to do so).

\textsuperscript{8} Lewis Carrol, Alice's Adventures in Wonderland, "Well! I've often seen a cat without a grin, thought Alice, 'but a grin without a cat! It's the most curious thing I ever saw in all my life!'"
developed in the various states. I will consider the effect of the Federal Tort Claims Act and its limited waiver of sovereign immunity on the viability of these claims when asserted in a suit against the United States. I will also discuss the ability to claim medical monitoring under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA).  

**WHAT IS A TOXIC TORT?**

Before addressing the area on damages in toxic tort litigation, one must first address the threshold issue of what is a "toxic tort?" A toxic tort is a tort claim that results from the alleged exposure of the plaintiff to toxic (usually chemical but sometimes radioactive) substances because of the defendant's actions. The claim is usually based on a negligence theory, but on occasion claims in the nature of strict or products liability have been

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10 42 U.S.C. 9607 et seq.

11 The option of claiming medical monitoring under the various state law analogues to CERCLA (such as Pennsylvania's HSCA) or medical monitoring in the occupational setting (independent of tort liability) will not be discussed in detail, as these are beyond the scope of this project. See, Hazardous Sites Cleanup Act, 35 Pa. Cons. Stat. Ann §§ 6020.101-6020.1305. However, in representing either a plaintiff or defendant in a medical monitoring action the state "Superfund" type law must be considered. For example, in Pennsylvania, the court has held (in a case of first impression), that the HSCA referred to above does provide for recovery of both medical and legal costs. Manella v. Sequa Corp., Pa. Ct.Comm.Pls., Bucks Cny., No. 89-1069-21-2, Oct. 20, 1992, 7 Toxics Law Rpt. (BNA) 715 (11 Nov. 1992).

made. Though tort law is a question of state law, and each state in the union has developed its own precedents and theories, all share a common basis in English common law.

Negligence as a cause of action traditionally has four parts, duty, breach of that duty, proximate cause and injury. The traditional way of describing negligence is as a four legged stool, with the analogy being that if one leg is missing then neither the stool nor the cause of action can stand. To the extent that claims for damages without proof of present injury are recognized, the elements of the cause of action are reduced to two. Without a requirement to prove injury there logically can be no requirement to show the actual causation of the injury. Assuming that there is a duty not to expose people to hazardous chemicals, the elements remaining are proof of exposure to toxic substances and the amount of money needed to compensate the plaintiff for future medical expenses, increased risk of future health problems and fear of developing disease in the future. It is necessary to show that the chemical in question could cause future injury, which is much easier than showing that it has caused or will cause an injury.

13 Claims other than negligence are beyond the FTCA's limited waiver of sovereign immunity, as will be discussed infra. 28 U.S.C. §1346(b); See generally, Lester Jayson, Handling Federal Tort Claims at §§211.01, 225.

14 Without forgetting that Louisiana has part of its historical roots in the French Civil Code.


The various alternative measures of damages (medical monitoring, enhanced risk of future disease and fear of disease) have all developed in response to the difficulty in showing injury and causation in the case of exposure to chemicals in less than acutely toxic amounts. While differing in how they attempt to quantify and compensate for these alleged injuries, the measures also have many characteristics in common, as would be expected from doctrines that have common intellectual roots.

**AN INTRODUCTION TO ALTERNATIVE DAMAGE THEORIES**

An action for medical monitoring seeks to recover only the cost of periodic medical examinations needed to detect the onset of physical injury from chemical exposure. The aim is to compensate the plaintiff for the cost of any special medical procedures that may help lead to early detection of the diseases in question. This should include only the medical care beyond that recommended for the general public. The cause of action for medical monitoring assumes that earlier detection will lead to earlier diagnosis and an improved chance of successful treatment.

By comparison, a claim for enhanced risk of disease seeks payment for the anticipated harm itself, perhaps discounted by the possibility that the injury may never occur (i.e., a $10,000.00 injury with a 10% possibility of occurring

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18 *Id.*
would be "worth" $1,000.00). With medical monitoring, the question is will the plaintiff, to a reasonable probability, need medical tests to protect his health due to exposure to the defendant's toxic substance? In a claim for enhanced risk the question is does plaintiff have an increased chance of developing disease because of his exposure to the defendant's toxic substance?

Damages for the fear of future disease, where no symptoms presently exist, are based on the assumption that once the plaintiff knows he has been exposed or may have been exposed to a toxic substance, he will worry about future health effects caused by that exposure. It is also assumed that the plaintiff should be compensated for the fear and worry which accompany the knowledge of exposure.

A PAGE OF HISTORY

There are times when, as Justice Holmes observed, a page of history can be worth a volume of logic. To understand how the American tort system attempts to determine the appropriate compensation for the victims of toxic chemical exposure, it is necessary to look back at its origins to understand where it is and to attempt a prediction about where the system might be going.

The tort system as it stands today developed in a simpler time when it had to respond only to accidents and injuries that were completed in a short

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19 In Re Paoli R.R. Yard PCB Litigation, 916 F.2d 829 (3rd Cir. 1990).
20 Id.
21 New York Trust Co. v. Eisner, 256 U.S. 345 (1921)
period of time. Although the effects of those injuries could last a lifetime, the infliction of the injury was immediate.22

A civilized society must have some method of settling disputes and compensating victims other than the might makes right rule provided by the law of club and fang. For dealing with personal injury disputes contemporary American society uses a tort system.23

WHAT IS A TOXIC TORT?

Since the subject of this thesis is the recovery of non-impact damages in toxic torts, it is important to define the term "toxic tort". In one sense, it is simply a tort action where the means of alleged injury is a toxic or hazardous substance instead of the more traditional automobile, fist or club.24 However, "toxic tort" actions tend to have distinguishing features

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23 See, e.g., Guido Calabresi, The Cost Of Accidents: A Legal and Economic Analysis 26 (1970) (taking it as "axiomatic that the principal function of accident law is to reduce the sum of the costs of accidents and the costs of avoiding accidents"); W. Page Keeton et al., Prosser and Keeton On The Law of Torts § 2, at 7 (5th ed. 1984) (stating that tort law's "primary purpose is to compensate [the victim] for the damage suffered, at the expense of the wrongdoer"); Richard A. Posner, Economic Analysis of Law 176 (1986) (stating that "[m]aintaining the credibility of the tort system requires that if a defendant is found liable, he must pay damages at least as great as [the victim's losses]"). See also, W. Prosser, J. Wade and V. Schwartz, Cases and Materials on Torts 1 (8th Ed. 1988).

24 Robert L. Rabin, Environmental Liability and the Tort System, 24 Hous.L.Rev. 27 (1987); Wendell B. Alcorn, Jr., Liability Theories for Toxic Torts, 3 Nat. Resources and Env't 3 (1988)("The term "toxic tort" is a product (cont)
that set them apart from the ordinary, run of the mill (or running a red light) auto accident case.

**WHAT IS A TORT?**

Before something can be a toxic tort it must first be "a tort." In the first few days of law school every lawyer learns that "a tort is a civil wrong not arising out of contract."25 This almost completely circular definition is not particularly enlightening, because without a definition of a civil wrong, the definition is useless.26 Professor Keeton defines "civil wrong" as an injury to legally recognized and protected rights by the actions of another and without the consent or agreement of the injured party.27 Therefore, where an injury from the actions of another does not have a contractual basis, it is a tort.

Toxic tort claims arise from a wide variety of factual situations and under differing legal theories,28 but they have several distinguishing

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- albeit an undesirable one - of modern industrialization. In broad terms, encompasses any wrongful injury resulting from exposure to one or more hazardous substances”).


26 Id.


28 For example they may involve exposure through air, water or soil contamination. They may involve chemicals or radioactive substances, and may be founded in either negligence or strict liability, or some combination of (cont)
characteristics that set them apart from other tort litigation.\textsuperscript{29} These characteristics are important not just for academic discussion and classification, but also for the practitioner, because they suggest and support additional theories of liability and defense. They also affect the way the litigation is managed by both court and counsel.\textsuperscript{30}

The first characteristic of a toxic tort is that it involves injuries that allegedly stem from exposure to harmful substances.\textsuperscript{31} While a toxic tort action may sound in nuisance, negligence or products liability, this is the one characteristic that every toxic tort claim will have in common with any other toxic tort claim.

In acute exposure cases (e.g., a Bophal like situation) the factual issues presented are not greatly different from those of a bus or airplane accident. Acute exposure cases usually involve questions about who was at fault for the accident, and are less concerned about the incident itself. However, in the case of chronic exposure to a toxic substance that results in latent injury,\textsuperscript{32} there are two questions. The first question is who was

\begin{itemize}
  \item \textsuperscript{29} Michael Dore, The Law of Toxic Torts § 2.02 (1992).
  \item \textsuperscript{30} \textit{Id.}
  \item \textsuperscript{31} Wendell B. Alcorn, \textit{Liability Theories for Toxic Torts}, 3 Nat. Resources & Env't 3 (1988).
  \item \textsuperscript{32} Latency period is the interval of time between a person's exposure to the toxic substance responsible for the manifestation of a disease, and the first signs of the disease by definitive symptoms or actual detection. \textit{See}, F. Homburger, J. Hayes & E. Pelikan, A Guide To General Toxicology 203 (1983)
\end{itemize}
responsible for the exposure. The second question is could the substance in question, in the amount alleged, have caused the injuries claimed?\textsuperscript{33}

The second characteristic of toxic torts is that most cases involve the exposure of large numbers of people to similar amounts of similar chemicals.\textsuperscript{34} This is important in an administrative and practical sense, as it tends to change the way lawsuits are litigated. Sometimes they are class action suits,\textsuperscript{35} or they may be consolidated actions with groups of "lead" or "bellwether" plaintiffs who were picked because their claims are representative of the groups.\textsuperscript{36} The huge amounts of money that can be involved when there are multiple plaintiffs can encourage settlements.\textsuperscript{37} This is because adverse rulings can bankrupt companies, drive products from the market,\textsuperscript{38} and destroy entire industries.\textsuperscript{39} It is also alleged that fear of litigation, with its associated risks, is keeping new products from


\textsuperscript{34} Though there are notable exceptions, for example Hagerty v. L & L Marine Services, 788 F.2d 315 (5th Cir. 1986) which involved both a single individual and a single large scale exposure (a tankerman who was "drenched" in a hazardous substance when a valve on his employer's barge malfunctioned.

\textsuperscript{35} Fed. R. Civ. P. 23.


\textsuperscript{37} In Re Fernald Litigation, No C-1-85-0149 (S.D. Ohio June 30, 1989).

\textsuperscript{38} Peter Huber, Galileo's Revenge 128 (1991).

\textsuperscript{39} P. Brodeur, Outrageous Misconduct: The Asbestos Industry on Trial (1985).
the market and has discouraged research and development in new products. It is further alleged that as a result of this, the competitive position of American industry has been damaged.\textsuperscript{40}

Another important characteristic of toxic tort litigation is that often the full consequences of the exposure may not be immediately apparent, because many of the diseases in question have long latency periods.\textsuperscript{41} This makes determining causation more complicated. Also, the connection between exposure and illness in any given individual may not be linear. For example, there may not be a direct dose/response relationship, and there may be a threshold level of exposure below which no harm can be shown. Also, the passage of time allows for both loss of evidence and the opportunity for intervening causes.\textsuperscript{42} The passage of time between the exposure and the onset of symptoms may also lead to problems in identifying the source of the substance, although its nature may be known. For example, it may be known that a plaintiff's mother took DES, but it is not possible to tell who made the DES, or who sold it, etc.\textsuperscript{43}

\begin{thebibliography}{99}
\bibitem{43} R. Meyers, \textit{D.E.S. the Bitter Pill} (1983). DES is short for Diethylstilbestrol, or diethyl stilbestrol, a synthetic estrogen which duplicates the actions of natural estrogens. It is used for estrogen (cont)
\end{thebibliography}
Another characteristic of the "average" toxic tort suit is that the evidence used to support claims of harm, and to show causation where required, is at or often beyond the frontiers of recognized science. This is driven by a combination of the amount of money involved and the difficulty in determining the mechanism of injury or the source of the substances. Whether this represents daring scientists on the cutting edge of knowledge who are willing to risk public ridicule to advance the state of the art and help an injured person gain just compensation, or quacks and fools looking to line their own pockets by testifying to scientific nonsense is a great debate.

The next group of characteristics relates to the unpredictability of the outcome and the amount of money involved referred to above. Often the

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replacement therapy, but was formerly used to prevent miscarriage in pregnancy. However, it is no longer used for that purpose due to the possibility that its use caused cancer in the reproductive organs of the children born of these pregnancies. New American Pocket Medical Dictionary (1978).


45 See, Clifford J. Zatz, Defenses on the Frontiers of Science, 19 Litigation 1 (Fall 1992) at 13; See also, Daubert v. Merrell Dow Pharmaceuticals Inc., 951 F.2d 1128 (9th Cir. 1991), Cert. granted, 61 U.S.L.W. 3277 (Oct 13, 1992) where the Supreme Court has agreed to hear a case where the issue is the exclusion of scientific evidence because the studies the expert was relying on had not been published and peer reviewed; and Federal Evidence Rules, High Court Brief Says, Toxic Law Daily (BNA) Jan 8, 1993, where the briefs of the plaintiff and an amicus brief in this case are discussed.

46 See also, Peter Huber, Galileo's Revenge 119(1991) ("Smarter plaintiff's lawyers don't want a trial; a trial, after all, carries with it the risk of losing everything if the theories of a William McBride or an Alan Done [Plaintiff's experts whom Mr. Huber was very critical of in his book] don't quite persuade. But defendants don't want any part of a huge trial either, (cont)
plaintiff's injuries are so serious or the plaintiff is so sympathetic (or conversely the defendant is so unsympathetic) that traditional tort defenses such as contributory negligence, statute of limitations, requirement of actual injury, etc., are evaluated critically by the court. For example in Anderson v. W.R. Grace and Co. the court was faced with families who had watched their children die of leukemia. The court did not allow them to recover for the mental distress from watching their children's illness, nor for their own enhanced future risk of disease (which was less than probable). However, it interpreted the wrongful death statute in a way that avoided the statute of limitations. The court also allowed recovery for the possibility that existing diseases would increase in severity. Similarly, in Brafford v. Susquehanna Corp., a Federal District Court deciding a question of South Dakota state law under Erie held that though physical injury was required to recover for the increased risk of future disease under South Dakota law, "subcellular injury" met this requirement. There was no evidence of any current effect on the plaintiff's bodily functions. Subcellular injury

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partly because legal fees in this kind of litigation are astronomical, partly because there's always some risk, no matter how solid your scientific case may be, that you will still lose.

47 Which of course suggest another of Justice Holmes witticisms that "great cases, like hard cases make bad law." Northern Securities Co. v. United States, 193 U.S. 197 (1903).


50 Erie R.R. Co. v. Tompkins, 304 U.S. 64 (1938).
consisted of the plaintiff's expert saying that exposure to radiation from mine waste used as fill caused injury at the level of internal cell structure, without any other indicia that the injury had in fact happened.

The last group of characteristics of toxic torts are all administrative in nature, and so do not, for the most part, affect the damages that can be recovered. First is that the size, nature and complexity of toxic tort actions can cause administrative and procedural problems for the court system in dealing with the litigation. The second is that insurance coverage disputes are frequently present. This is due in large part to the difficulty in determining when or by what mechanism the injury occurred. When combined with the practice of large industrial concerns of purchasing their insurance coverage on a competitive bid basis, with frequent changes of insurers, this leads to arguments about which carrier should defend and pay the claim.51

The possibility of disputes about insurance coverage is important, as it may affect the relative positions taken by both the plaintiff and the defendant as each maneuvers for position. This is particularly so when dealing with a defendant in danger of filing bankruptcy or otherwise becoming judgement proof.52 For example, a plaintiff to gain punitive damages may want to show that certain acts were intentional. However, if the defendant is of questionable financial strength, the plaintiff will want to stress


negligent acts to avoid the hollow victory of a judgement for which there is no source of payment.

Many insurance polices exclude punitive damages from their coverages and in some states the law forbids insurance coverage of punitive damages on grounds of public policy. It is thought that allowing insurance against punitive damages would lessen their deterrent effect.

Thus, a defense that is successful on one count but not another may shift the burden of coverage. Certain positions taken during the primary litigation may prove binding on that party in later or parallel insurance coverage litigation, or vice versa. Damages resulting from intentional acts are excluded from coverage under nearly all insurance policies. The risk is that in proving that the actions involved were not intentional but merely


55 Northwestern National Casualty Co. v. McNulty, 307 F.2d 432 (5th Cir. 1962)


negligent the court may find that the acts occurred, and the defendant may be bound by that finding.58

Furthermore, the facts involved may give rise to additional liability exposure, such as corporate or individual exposure to civil fines or criminal liability.59 The same showing of willful and intentional action that avoids the insurance coverage may also support personal civil or criminal liability for a corporate officer under the environmental laws.60

TOXIC TORT DAMAGES

Damages in toxic torts reflect the nature of the underlying actions in that they are diverse and complicated. All of the normal and ordinary damages that one might see in any tort action, such as lost wages, past and future medical expenses and emotional distress (including pain and suffering) can of course be claimed and, if proved, awarded in a toxic tort action.61 However, there are other elements of damages that if not unique to toxic torts are


59 Michael Dore, The Law of Toxic Torts § 2.02 (1992). See also, Arnold W. Reitze, A Century of Air Pollution Control Law: What's Worked; What's Failed and What Might Work, 21 Environmental Law 1549, at 1569. (In the area of "buying off" claimants for equitable relief this was referred to as "the extortion value of equitable relief", and that value is even greater when the facts which might be revealed carry with them the possibility of senior executives facing criminal sanctions and jail.).

60 See, Federal Indictment Hits Company Officials with Criminal Charges, $15.2 Million in Fines, 23 Env't. Rep. (BNA) 1373 (Sept. 11, 1992), where the defendants in a toxic tort case also faced a criminal indictment.

comparatively common in them, and comparatively rare elsewhere. Chief among these elements of damages are claims for the increased risk of disease, claims for emotional distress from the fear of acquiring a disease and medical monitoring.

62 Although some commentators have suggested that there is no good reason for this, and if one can recover for the fear of a cancer one may never get, one should be able to recover for the fear of having to share the highway with a driver that you believe to be reckless. See, William H. Armstrong, Tort Damages for Injuries Not Yet Suffered, 3 Nat. Resources and Env't 26 (1988).
CHAPTER 2

Medical Monitoring

"Medical monitoring" is the practice of repeating a test or series of tests for the purpose of following changes in the patient's condition. In tort law the concept of medical monitoring is used to justify the award of damages to pay for testing required to detect latent diseases and (hopefully) protect the plaintiff from additional harm. These are cases where the plaintiff has been put at risk (or increased risk) because of the defendant's actions. It is assumed that early detection of these diseases will lead to early treatment and a better long term prognosis.

The theory of medical monitoring developed in response to the perceived inability of traditional tort law to address the problem of potential injury by hazardous substances. Normally, one must show injury before claiming to have suffered a legal harm. However, in the case of hazardous substance exposures there may be years, decades, or, in some cases such as DES or genetic injury, generations between exposure and eventual injury.

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64 Which is also referred to as medical surveillance, but as was discussed in the introduction I will use "medical monitoring" unless quoting someone.

65 In Re Paoli R.R. Yard PCB Litigation, 916 F.2d 829 (3rd Cir. 1990) (hereinafter In Re Paoli).


68 In Re Paoli, at 850; See also, Lesile S. Gara, Note, Medical (cont)
Medical monitoring claims may be either an element of legal damages, an independent tort, or a form of equitable relief. These differing forms of the claim exist because medical monitoring developed from several different theoretical roots. While various states have differing requirements for the award of medical monitoring damages there is one fact that sets medical monitoring apart from any other claim in toxic substances personal injury litigation. That is there is no requirement to show present injury. Since there is no requirement to prove injury, there is no issue regarding the cause of that injury (i.e., causation). Since there is no requirement to prove causation, the plaintiff's burden of proof is much more easily met.

In essence, the requirements for recovery have been reduced to showing that the plaintiff has been exposed to hazardous substances, that the defendant was more likely than not the source the hazardous substances, and that some form of expanded medical testing and follow-up is needed. The trade off for the reduced evidentiary burden is that the recovery under a

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69 Although the usual shorthand phrase is "toxic tort", I used the longer version here to reflect that many medical monitoring awards sound in equity and not tort. However, as a matter of stylistic convenience I will otherwise use "toxic tort" although the reader is reminded that this includes remedies that are not based in tort.


medical monitoring theory is limited to the expected cost of this testing.\textsuperscript{72} This is the basic outline of liability in those jurisdictions that have accepted medical monitoring as an independent tort or separate remedy. Although the details of the requirements for an award of medical monitoring damages vary from jurisdiction to jurisdiction, and are still in a state of flux in most, all conform to this basic outline.

In those jurisdictions that have rejected medical monitoring as both an independent tort and as a separate remedy, it is considered to be just another form of future medical expense. Accordingly, in these jurisdictions the plaintiff must meet all the traditional requirements for recovery in tort, including causation. He must then prove that the monitoring requested is medically necessary and required due to his exposure to the hazardous substances released by the defendant.\textsuperscript{73}

The First Case

The modern development of medical monitoring is an example of the "law of unintended consequences."\textsuperscript{74} There is almost universal agreement that the origins of modern medical monitoring theory and litigation can be traced to

\begin{itemize}
\item \textsuperscript{73} Ball v. Joy Technologies, Inc. 958 F.2d 36(4th Cir. 1991)("A claim for medical surveillance costs is simply a claim for future damages. Plaintiff correctly points out that the law of West Virginia allows the recovery of the reasonable value of future medical expenses necessitated by the defendant's wrong."); Morrissy v. Eli Lilly and Company, 394 N.E.2d 1369 (1979).
\end{itemize}
Friends for All Children v. Lockheed Aircraft Corp., \(^{75}\) and from there to the decision of the New Jersey Supreme Court in Ayers v. Jackson Township.\(^{76}\) Ayers was the first time medical monitoring was applied in a toxic tort case.

Friends for All Children was not a toxic tort case, but involved the crash of a Lockheed C5A military transport aircraft. The C5A was being used to evacuate Vietnamese orphans from Saigon during "Operation Babylift" in the closing days of the Vietnam war. The locking mechanism that kept the doors and cargo ramp closed failed. Because of that failure the airplane crashed. Most of the passengers where killed, but 149 survived and were brought to the United States by a second airplane.

It was alleged that the children who survived the crash were at risk for neurological disorder generically known as Minimal Brain Dysfunction (MBD) because of the "explosive decompression"\(^{77}\) and hypoxia\(^{78}\) they suffered during the air crash. Accordingly, a suit was filed against Lockheed on

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\(^{75}\) 746 F.2d 816 (D.C. Cir. 1984).

\(^{76}\) 525 A.2d 287 (N.J.1987)

\(^{77}\) To enable airplanes to fly at high altitudes where the air is thinner (and therefore contains less oxygen) without the crew and passengers either suffering the effects of inadequate oxygenation or having to wear oxygen masks, the cabin of modern aircraft is pressurized so that it more or less simulates the conditions that exist at sea level. When the structure of the airplane is punctured or otherwise fails, this pressure is suddenly released, resulting in an "Explosive Decompression" as the higher pressure in the aircraft is released and rushes out. The effect is similar to popping the top on a can of soda that has been shaken, except that the substance under pressure is air and not soda.

\(^{78}\) Hypoxia is a diminished amount of oxygen in the blood. New American Pocket Medical Dictionary (1978).
behalf of the children.  

After several years of litigation involving numerous appeals and remands, a stipulation was reached in which Lockheed agreed not to contest liability and the plaintiffs agreed not to seek punitive damages. After this partial settlement, several of the plaintiff's cases where tried to juries in the D.C. District Court. It was expected that these "bellwether" cases would result in an overall settlement, but this did not occur. As a result, the plaintiffs, prompted by the court's sua sponte suggestion that they do so, moved for partial summary judgement on Lockheed's liability for diagnostic examinations and medical treatment. They also asked for "preliminary relief ordering Lockheed to pay for such examinations and treatment pendente lite." As a part of their grounds for the pendente lite relief, the plaintiffs alleged and offered evidence that the children would not benefit from the therapy that might be suggested after testing unless the testing was accomplished before the children reached adolescence. 

After nearly two years of procedural wrangling, the District Court granted plaintiff's motion for summary judgement for diagnostic testing, but

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79 Id. at 819. Lockheed then implead the United States, which led to certain complicated procedural maneuvers which delayed the progress of the case, but which are otherwise of no significance to the issue of medical monitoring.

80 Id. at 820.

81 Id.

82 Id.

83 Id. at 825.

84 Including an additional trip to the Court of Appeals (on an unrelated issue.)
not for medical treatment. Because the amount of money that these examinations would cost was still in dispute despite (or perhaps because of) 12 days of evidentiary hearings, the court could not enter judgement as to the exact amount of Lockheed's liability to the individual plaintiffs. However, it did order Lockheed to create a fund from which the cost of the diagnostic examinations could be drawn.85

The District Court did not enter summary judgement on the issue of medical treatment (as opposed to medical testing) because despite admitting that it was a fault for the crash,86 Lockheed continued to dispute that the plaintiffs were in fact suffering from MBD. Lockheed also contended that if any of the plaintiffs did have MBD, it was not caused by the crash. Lockheed appealed the partial summary judgement ordering pendente lite relief, and the case once again went to the Court of Appeals.87

The Court of Appeals affirmed the decision of the District Court, but it did so on narrow grounds. An injunction that requires the payment of money to the plaintiff before the conclusion of the litigation is a most unusual remedy. The remedy was justified in large part by the fact that Lockheed had stipulated to liability, and that the court had therefore entered summary judgement on that issue. In upholding the order for the injunction, the Court of Appeals made it clear that this was an extraordinary remedy, and that it was the inherent equitable powers of the court that gave the District Court

85 Id. at 822.
86 Or more precisely having agreed not to contest the allegation that it was liable for the crash, Id.
87 Id.
the authority to order this interim relief. The court also took pains to make its ruling as narrow as possible.

Finally, appropriate to the novelty of the case before us, we emphasize the narrowness of today's holding. We hold only that a preliminary injunction requiring the defendant to create a fund to pay for diagnostic exams is proper when the defendant has been held liable for the costs of such examinations and when the delay inherent in trying the case to compute the amount of the defendant's liability will result in irreparable injury. Moreover, under our holding, plaintiffs must show that they meet traditional standards governing the award of equitable relief, and the District Court must seek to minimize the prospect that a plaintiff will receive any funds that a trier of fact will subsequently fail to award.

**Ayers v. Jackson Township**

Almost three years passed between *Friends of All Children* and the next major case in the development of the modern theory of medical monitoring, *Ayers v. Jackson Township.* *Ayers* was the first time medical monitoring was awarded in a toxic tort case and was approved by a state's highest court. It was also the first time the concept was allowed to escape the narrow limits within which the D.C. Circuit had tried to confine it in *Friends of All Children.*

*Ayers* was factually a typical toxic tort action where the township, through its improper operation of a landfill, contaminated the groundwater plaintiffs drank. When the contamination was discovered, the township informed the plaintiffs and provided an alternative water source.

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88 Id., at 828.
89 Id. at 831.
90 525 A.2d 287 (N.J.1987).
91 Id. at 296-97. It is interesting to note that for over two years the (cont)
plaintiffs sued seeking damages for their increased risk of disease due to the contaminants in the water. They also sought damages for medical monitoring expenses. The trial court found that the action for increased risk of disease was not allowed by New Jersey law, and granted summary judgement for Jackson Township on that issue. The trial court ruled in favor of the plaintiffs on the issue of medical monitoring damages. However, the intermediate appellate court reversed.

The award for medical monitoring expenses was reinstated when the plaintiffs appealed to the New Jersey Supreme Court. Relying on Friends for All Children and Reserve Mining Co. v. E.P.A. the New Jersey Supreme Court found that medical monitoring expenses could be awarded for

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plaintiffs where forced to make do with a primitive temporary water system that involved having 40 gallon barrels of water dropped off at the road side, which the residents then were forced to carry into their homes and scoop water from. Although not relevant to the issue of medical monitoring, this did support an award for their inconvenience, notwithstanding a statutory bar of "pain and suffering" damages against municipalities under the N.J. Tort Claims Act.

92 Id.
93 The increased risk claims will be discussed in the chapter dealing with that issue.
95 Ayers at 312.
96 Id.
97 514 F.2d 492 (8th Cir.1975)(This was a regulatory case where an injunction was upheld despite the fact that "[i]n assessing probabilities in this case, it cannot be said that the probability of harm is more likely than not.").
increased risk alone, but substantive damages for that same increased risk could not be awarded.\textsuperscript{98} The court held that:

The likelihood of disease is but one element in determining the reasonableness of medical intervention for the plaintiffs in this case. Other critical factors are the significance and extent of the exposure to chemicals, the toxicity of the chemicals, the seriousness of the diseases for which individuals are at risk and the value of early diagnosis.

The court specified that these factors would have to be shown by "reliable expert testimony."\textsuperscript{99} The court went on to add that:

Even if the likelihood that these plaintiffs would contact cancer were only slightly higher than the national average, medical intervention may be completely appropriate in view of the attendant circumstances. A physician treating a Legler-area child who drank contaminated well water for several years could hardly be faulted for concluding that child should be examined annually to assure early detection of symptoms of disease.

The plaintiffs had requested the medical monitoring expenses as an ordinary lump sum money judgment. Since the defense raised no objection to this, the trial court awarded the medical monitoring expenses as a lump sum. It was only on appeal that the defendants raised the question of whether medical monitoring costs should be awarded in the form of a court supervised trust or fund.\textsuperscript{100} The defense argued that the plaintiffs should be required to apply to a fund for payment of their medical monitoring expenses as they were incurred.

\textsuperscript{98} Ayers, Supra. at 312.

\textsuperscript{99} Id. What is "reliable expert testimony" is of course the subject of a massive debate all its own. See, e.g. Peter W. Huber, Galileo's Revenge's: Junk Science in the Courtroom (1991).

\textsuperscript{100} This assumes plaintiff should be awarded medical monitoring expenses, which the defense still disputed.
Since the Court of Appeals overturned the entire grant of damages for medical monitoring it did not have to face this question. However, when the New Jersey Supreme Court revived the award for medical monitoring expenses, they also revived this issue.101 The plaintiffs pressed for payment of the damages in a lump sum, as originally awarded by the trial court. Although the Supreme Court chose to leave the trial court's award of a lump sum undisturbed this was largely for reasons of administrative convenience and judicial economy. Since the issue of a fund to pay these expenses had been raised for the first time on appeal, it would have been necessary to reopen the entire question of damages for each plaintiff in order to separate out the portion to be allocated to medical monitoring. The Court did not want to require this, but said that in future cases the use of a fund mechanism was the preferred remedy.102

There is no doubt that the New Jersey Supreme Court believed that the trial court's authority to order the plaintiff's medical monitoring expenses be paid through a court supervised fund came from the courts equitable powers.

In our view the use of a court-supervised fund to administer medical-surveillance payments in mass exposure cases, particularly for claims under the Tort Claims Act, is a highly appropriate exercise of the Court's equitable powers.

The court then went on to say (while quoting with approval from Judge

101 Id. at 313.

102 Id. at 314-15. In this case the court was dealing with a claim against a municipality under the New Jersey Tort Claims Act. However, it should be noted that while the court said the use of the fund mechanism to pay medical monitoring claims was particularly well suited to claims under the New Jersey Tort claims Act, it did not say "only under the [New Jersey] Tort Claims Act."
Weinstien's opinion In re "Agent Orange" Prod. Liab. Litig.\textsuperscript{103}) that:

[S]ince "implementation of any distribution plan based on traditional tort principles is impossible because of a virtual absence of proof on causation" it was appropriate to consider "alternate methods of distributing [the] settlement fund [that] may be premised on a rationale similar to the cy pres doctrine of testamentary interpretation.\textsuperscript{104}

While the court said it was dealing with an equitable remedy, this is inconsistent with the court's action in leaving undisturbed the award of a lump sum to each plaintiff. This apparent inconsistency is somewhat clarified by the court's explanation that since the awards had been tailored by the trial court to each defendant while including the medical monitoring costs in the verdict, and since this was a new rule they would not disturb the decision of the trial court.\textsuperscript{105} This suggests that either medical monitoring costs were once legal damages but are now available only as equitable remedies, or that they may be either depending on the circumstances. The latter conclusion runs against the general rule that equity is only available when the remedy at law is inadequate.\textsuperscript{106} The decision was a pragmatic one balancing the court's theory against its desire to avoid a retrial of the case.

The key, though unstated, assumption that underlies the New Jersey Supreme Court's opinion is that increased risk is in fact an injury.\textsuperscript{107}

\textsuperscript{103} 611 F. Supp. 1396, at 1402-3 (S.D.N.Y.1985), aff'd 818 F.2d. 194 (2d Cir.1987).

\textsuperscript{104} Ayers, \textit{Supra}, at 313.

\textsuperscript{105} Id. at 315.


However, due to the difficulty in proving the extent of the injury the plaintiff has only a limited right to recover damages. The injury is one that the court lacks the ability to measure or access with a sufficient degree of accuracy to allow the award of compensation for.\textsuperscript{108}

Ascertaining the approximate cost of medical screening, monitoring and surveillance to look for symptoms or signs of disease is within the ability of the courts.\textsuperscript{109} Thus the distinction between medical monitoring and the risk of future disease is less a matter of principle than practicality.\textsuperscript{110} If it is agreed that a person exposed to chemical X is at greater risk for disease Y, and that the outcome of disease Y is better if detected early by the use of test Z, all that is needed is to determine damages is the cost and frequency of test Z. Though not without its uncertainties such as changing medical technology and discounting to present value, this process is more certain than trying to determine if the exposed individual will actually develop the disease. It is also more certain than trying to determine what is a given individual's probability of developing the disease in question.

The Supreme Court of New Jersey revisited the area of medical monitoring in an asbestos case,\textsuperscript{111} \textit{Mauro v. Raymark Indus. Inc.}\textsuperscript{112} The court affirmed


\textsuperscript{109} The fact that the cost can only be determined in rough terms is the reason for the use of a court supervised fund, since if it could be determined with certainty there would be no reason not to award a lump sum, which would be much simpler for all concerned.


\textsuperscript{111} Though not always thought of in these terms, asbestos cases represent a classic "toxic tort" in that they arise from the widespread use of a substance, the dangerousness of which was not fully appreciated. Furthermore, (cont)
the award of medical monitoring costs to a single plaintiff. The court quoted extensively from *Ayers*, thus making clear that *Ayers* was not limited to cases under the New Jersey Tort Claims Act.\(^\text{112}\) In *Mauro* the award was for a lump sum for medical monitoring expenses which suggests that the New Jersey Supreme Court considers medical monitoring to be a legal remedy, though one that may have some equitable features in a mass tort situation. Similarly, in *Herber v. Johns-Manville Corp.*\(^\text{113}\) another asbestos case, the Third Circuit (applying New Jersey law and citing *Ayers*) treated medical monitoring as a compensable element of tort damages rather than as equitable relief.

**Further Development Allowing Medical Monitoring**

While the New Jersey Courts were wrestling with medical monitoring costs in *Ayers*\(^\text{114}\) the issue was being raised in a toxic tort claim in a Pennsylvania trial court, *Habitants Against Landfill Toxicants (HALT) v. City of York.*\(^\text{115}\) *HALT* was decided before the New Jersey Court of Appeals reversed the *Ayers* trial court. The plaintiffs in *HALT* were property owners whose wells had been contaminated with toxic substances from a landfill operated by

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the of injury from asbestos does not appear for years or even decades and is a result of chronic exposure.

113 *Id.* at 262.
114 785 F.2d 79 (3rd Cir. 1986)
115 Supra.
the city of York and other defendants. In addition to separate actions at law for damages, the plaintiffs filed an equity action seeking a million-dollar medical monitoring fund, an alternative water supply and assorted other relief.\textsuperscript{117} The defendants filed for summary judgement, alleging that, among other things, the plaintiffs had an adequate remedy at law. They also argued that Pennsylvania did not recognize an equitable action for medical monitoring. The court denied the defendant's motion, and found that Pennsylvania recognized an action seeking a constructive trust to pay medical monitoring expenses. The court cited to the trial court's ruling in \textit{Ayers}.\textsuperscript{118} With this decision denying summary judgement, the HALT case disappeared from the legal landscape.\textsuperscript{119}

The HALT case may have been gone, but it was not forgotten, for it was relied upon by the Federal District Court for the Middle District of Pennsylvania in the case of \textit{Merry v. Westinghouse Electric Corp.}\textsuperscript{120}

In \textit{Merry} the plaintiffs where again neighboring property owners whose wells were contaminated by toxic substances. They claimed that exposure to these substances, which included toluene and xylene,\textsuperscript{121} had resulted in

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{117} \textit{Id.}
\item \textsuperscript{118} \textit{Id.}, \textit{See also}, \textit{Ayers v. Jackson Township}, 461 A.2d 184 (N.J. Super. 1983).
\item \textsuperscript{119} HALT was a trial court decision reported only in Environmental Law Reporter, and no future references to the case have been found in any of the standard published reporters.
\item \textsuperscript{120} 684 F. Supp. 847 (M.D. Pa. 1988).
\item \textsuperscript{121} Toluene is a volatile hydrocarbon (C\textsubscript{6}H\textsubscript{5}CH\textsubscript{3}) with a benzene like odor. It (cont)
\end{itemize}
\end{footnotesize}
emotional distress, fear of future injury and disease, and increased risk of cancer and other diseases. Plaintiffs also requested the expenses of future medical monitoring and other damages.\textsuperscript{122}

The defendants moved for summary judgement which the court denied because it concluded that material issues of fact remained as to whether or not the plaintiffs had suffered physical injuries.\textsuperscript{123} The court held that in order to recover medical monitoring damages the plaintiffs needed to prove; exposure to a hazardous substance because of the defendant's actions, potential for injury, and the need for early detection and treatment.\textsuperscript{124}

The United States District Court for the Eastern District of Pennsylvania has also ruled (in denying summary judgement) that medical monitoring costs may be awarded but applied a slightly different standard. In \textit{Villari v. Terminix Int'l Inc.},\textsuperscript{125} the court held that under its reading of Pennsylvania law a plaintiff seeking medical monitoring costs must show some present injury, although not necessarily the symptoms of the disease to be monitored

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is used as an additive, and as a solvent feedstock in many chemical and industrial processes. Xylene is also a volatile hydrocarbon($\text{C}_6\text{H}_4(\text{CH}_3)_2$) that is a commercial mixture of three isomers (ortho-meta-, and para-xylene). It is used as an additive in gasoline, as a solvent in protective coatings and resins, and as a part of the production process for organic chemicals. \textsuperscript{126}Gessner G. Hawley, \textit{The Condensed Chemical Dictionary}, 10th Ed., 1031, 1100 (1981).

\textsuperscript{122} Merry, Supra., at 848.

\textsuperscript{123} See also, \textit{In Re Three Mile Island Litigation}, 87 F.R.D. 433 (M.D. Pa. 1988) where the court ruled that the need for medical monitoring was one issue that should be considered in determining whether or not to grant class action certification. If medical monitoring is not a recoverable element of damages, then the need for it would not be material to class certification.

\textsuperscript{124} \textit{Id.} at 850.

\textsuperscript{125} 63 F. Supp 727 (E.D. Pa. 1987).
for. This point was specifically rejected by the court in Merry, though the Merry court did find that the plaintiffs had suffered an injury. 126

To the extent that a Federal Court could, (in the absence of controlling state law precedent) 127 the Third Circuit Court of Appeals in 1990 resolved the conflict between the two district courts as to Pennsylvania Law regarding the requirements for an award of medical monitoring expenses. In In Re Paoli Railroad Yard PCB Litigation, 128 the Third Circuit predicted that the Pennsylvania Supreme Court would recognize a claim for medical monitoring. 129 The court then said the claimant would be required to meet the following four elements:

1. Plaintiff was significantly exposed to a proven hazardous substance through the negligent actions of the defendant.

2. As a proximate result of exposure, plaintiff suffers a significantly increased risk of contacting a serious latent disease.

3. That increased risk makes periodic diagnostic examinations reasonably necessary.

126 Merry, Supra., at 850, fn.7.

127 Parker Plaza West Partners v. Unum Pension and Insurance Company, 941 F.2d 349 12, 1991. (5th Cir. 1991) ([I]t is well established that if a state's courts have not authoritatively decided an issue, we are Erie-bound to decide what they would hold if presented with it." See, e.g. DiPascal v. New York Life Ins. Co., 749 F.2d 255, 260 (5th Cir.1985); Arceneaux v. Texaco, Inc., 623 F.2d 924, 926 (5th Cir.1980), cert. denied, 450 U.S. 928, 101 S.Ct. 1385, 67 L.Ed.2d 359 (1981).

128 916 F.2d 829 (3rd Cir. 1990).

129 Id. at 849.
4. Monitoring and testing procedures exist which make early detection and treatment of the disease possible and beneficial.\textsuperscript{130}

The present injury requirement put forth by the Eastern District in \textit{Villari} was specifically rejected. The Third Circuit cited \textit{Ayers} with approval, including the requirement that the above factors be proven by "competent expert testimony."\textsuperscript{131} The court did caution however, in a footnote, that:

In light of the statute of limitations problems caused by Pennsylvania law against splitting causes of action, we intimate no view as to whether a plaintiff who sues for medical monitoring must forego his or her claim for damages if and when the disease ultimately manifests itself.\textsuperscript{132}

The medical monitoring decisions of the New Jersey and Pennsylvania courts have been picked up by courts in other states. For example, state courts in New York,\textsuperscript{133} Arizona\textsuperscript{134} and Indiana\textsuperscript{135} have recognized the right

\textsuperscript{130} \textit{Id.} at 852

\textsuperscript{131} \textit{Id.}, citing \textit{Ayers v. Jackson Township}, 525 A.2d 287 at 312 (N.J.1987).

\textsuperscript{132} \textit{Id.} fn 25a.

\textsuperscript{133} \textit{Askey v. Occidental Chemical Corp.}, 477 N.Y.S.2d 242 (A.D. 1984) Where the court held that medical monitoring damages may be recovered on an individual basis; \textit{Geradi v. Nuclear Utility Services}, 566 N.Y. Supp., 2d 1002 (S.Ct. Wstch. Cty. 1991), which allowed medical monitoring "which may flow from the invasion of the body by toxic substances through negligent exposure."

\textsuperscript{134} \textit{Burns v. Jaquays Mining Corp}, 752 P.2d 28 (Ariz. Ct. App. 1987), petition for review dismissed, 781 P.2d 1373 (Ariz. 1987)(Citing Ayers, the court held that despite the lack of evidence of any present physical harm, the plaintiffs were entitled to regular medical testing "as [was] reasonably necessary and consistent with contemporary scientific principles applies by physicians experienced in the diagnosis and treatment of these types of injuries." \textit{But see, Destories v. City of Phoenix}, 744 P.2d 705 (Ariz. Ct. App. 1987), where the plaintiff's medical monitoring claim, though viable as a matter of law was rejected as factually insufficient due to the failure of the plaintiffs to prove the proposed expenses were "reasonably necessary."

to recover medical monitoring expenses without a requirement to show present injury, as have Federal District Courts in Minnesota\textsuperscript{136} and Hawaii.\textsuperscript{137}

**The Concept Broadens**

In *Barth v. Firestone Tire and Rubber Co.*\textsuperscript{138} the United States District Court for the Northern District of California decided a medical monitoring case filed by a worker at a Firestone plant in Salinas, California. The employee filed a suit seeking class certification on behalf of himself and other employees allegedly exposed to benzene, heavy metals, and other industrial toxins used or produced in the tire making process. Among other things, the plaintiffs contended that their class was entitled to equitable relief in the form of a fund designed to locate exposed employees and former employees, and then to pool and share the knowledge about the results of the alleged exposures.\textsuperscript{139} It was also expected that this fund would provide diagnosis and preventive medical care to minimize the extent of any future harms. The plaintiff (so as to be entitled to preliminary equitable relief) alleged that he and the other members of the class would suffer irreparable harm in the nature of misdiagnosis, mistreatment and loss of legal rights.  

\textsuperscript{136} Werlein v. United States, 746 F. Supp. 887 (D. Minn. 1990). The court denied medical monitoring under CERCLA and RCRA, but allowed as it could be a common law remedy in tort.


\textsuperscript{138} 661 F. Supp. 193, revised 673 F. Supp 1466 (N.D. Cal. 1987)

\textsuperscript{139} Id. at 194-96.
because of the failure to recognize symptoms if the fund were not granted.\textsuperscript{140} The court denied the defendant's motion to dismiss this claim.

To the extent that \textit{Barth} is good law,\textsuperscript{141} it stands for the proposition that medical monitoring is available in California as an equitable remedy, and that the plaintiff need not prove any present physical injury or impairment to be able to claim it. Interestingly enough, under the unique facts of \textit{Barth} it is only by showing no present injury or impairment that the plaintiffs can hope to recover. If they were to allege that they were suffering present harm or injury, the action, except for the parts of it that alleged intentional acts by Firestone, would be barred by the exclusivity provisions of California's worker's compensation laws.\textsuperscript{142}

\textbf{Cases Disallowing Medical Monitoring}

Although many courts have allowed claims for medical monitoring expenses, others have denied them or allowed them only with proof of present injury. Requiring proof of present injury is the functional equivalent of denying the claim for medical monitoring expenses since the plaintiff is then required to prove both the existence of the injury and its cause, as well as the need for

\textsuperscript{140} \textit{Id.} at 203.

\textsuperscript{141} The precedential value of \textit{Barth} can be questioned both on the grounds that it was only a decision denying a defense motion for summary judgment, not a final decision on the merits, and it was an \textit{Erie} guess by a single Federal District Court. Furthermore, one California District Court of Appeal (intermediate Appellate Court) has ruled to the contrary. \textit{See, Potter v. Firestone Tire and Rubber Co.,} 274 Cal. Rptr. 885 (Cal. Ct. App. 6th Dist. 1990), rev. granted 806 P.2d 308 (1992).

\textsuperscript{142} \textit{Barth v. Firestone Tire and Rubber Co.,} 673 F. Supp. 1466, 1471 (N.D.Cal. 1987).
the requested monitoring and its cost. In Potter v. Firestone Tire and Rubber Co. a California District Court of Appeal held a plaintiff must prove both present physical injury and a reasonable medical probability that he will develop the disease in question. This is in accord with the holding of the United States Court of Appeals for the Fourth Circuit, applying both Virginia and West Virginia law, that medical monitoring is only another form of future medical expenses.

Is it the Right Thing to Do?

The idea that one person who has caused another person to be exposed to a hazardous substance, placing the exposed person at increased risk for cancer or some other serious disease, should be required to pay for medical testing to prevent or mitigate the danger to the victims health is extremely appealing in an emotional sense. It seems to be all benefit and no detriment, except perhaps for the monetary expenditure by a big company accused of


144 Id.


polluting the environment. However, medical monitoring is not entirely benign in effect, and both courts and commentators have placed limits on the doctrine.

The Reporter's Study of the American Law Institutes project examining responsibility for personal injuries\(^1\) endorses medical monitoring, but in a limited fashion.\(^2\) Among the limitations the ALI study group recommends is an offset for items already covered by a collateral source such as insurance and a requirement that the need for monitoring be established by "reliable expert testimony." This might be provided by "court appointed experts or science panels."\(^3\)

The Reporter's Study does not advocate damages for medical monitoring which should be accomplished by a normal periodic medical examination, or that

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\(^2\) The Reporter's Study is an interim report and is not considered to be the position of the American Law Institute. The following notice appears on the cover of the report:

This Reporter's Study is being circulated by the Council to the members of the American Law institute for discussion at the Sixty-Eighth Annual Meeting on May 13,14,15,16, and 17, 1991. The Council has reviewed the material contained herein, but its consideration of the material is not yet completed. As of the date of publication the views expressed in the Reporter's Study have not been considered by the membership, and they therefore do not represent the position of the institute on any issue with which the Reporter's Study deals.

\(^3\) Enterprise Responsibility, Supra., at 379-80. The ALI Reporter's Study is very favorably inclined towards both court appointed experts and the use of special panels of scientific and technical experts to deal with the problem of "hired gun" experts and the perceived difficulty that courts have in dealing with scientific and technical questions. this view is shared by many other critics of the current liability system. See, e.g. Peter W. Huber, Galileo's Revenge's: Junk Science in the Courtroom (1991); Troyen A. Brennan, Helping Courts with Toxic Torts, 51 U.Pitt. L. Rev. 1 (1989) and Jack B. Weinstien, Improving Expert Testimony, 20 U. of Rich. L. Rev. 473 (1986).
which might be recommended by fringe "clinical ecologists." Rather, the
Reporter's Study recommends:

some sort of epidemiological investigation of where and when
the disease actually manifests itself among the exposed
groups. This work would serve both to inform the medical
profession about which people are in real need of early
treatment and to provide reassurance to people who turn out
not to be at risk.

The report then goes on to add that:

We do not favor awarding damages under the label of "medical
monitoring" and having the money paid directly to the
plaintiffs to be spent on additional medical attention only
if they are so inclined.151

Medical monitoring as proposed by the Reporter's Study is very appealing,
assuming that it is imposed based on a modified negligence theory with the
requirement of injury (and as a result causation) deleted. The requirements
of duty and breach will still give some degree of protection to the defendant
who acted as reasonably as possible at the time of his actions, but who now
finds decisions from the 1940's and 1950's being criticized from the
perspective of 1990's knowledge.152

150 See, American Academy of Allergy and Immunology, Position Statement:
Clinical Ecology, 78 Journal of Allergy & Clinical Immunology 269 (1986); Abba
I. Terr, Environmental Illness: A Clinical Review of Fifty Cases, 146 Arch. of


152 See, John E. Munter and Scott P. DeVries, Higgins v. Aerojet Corporation:
In Higgins a jury accepted the argument that the defendant Aerojet should not
have their conduct in the mid 1950's judge by the standards of the mid 1970's
(or at least they apparently accepted it, as the case ended in a defense
verdict).
Medical monitoring, despite its benign image is not without problems, even assuming that some sort of trust is imposed to insure that the money intended for medical monitoring is indeed spent for that purpose as opposed to funding additional litigation\textsuperscript{153} or a trip to Las Vegas.\textsuperscript{154}\ Medical monitoring without the requirement of injury leads the courts deeper into the thicket of scientific prediction.\textsuperscript{155} The requirement of actual physical injury acts as a floor for imposing liability and provides at least one clear reference point that does not take a Ph.D. in biostatistics to understand. The further the rules of liability move from their common law roots, the more each side is forced to rely upon experts. As this happens, the process is reduced to a battle of experts. The outcome must be decided by a panel of non-experts or a single non-expert in the case of a judge alone trial. This problem can be at least partially relieved by the use of court appointed experts and/or science panels as was recommended by the ALI Reporter's Study.\textsuperscript{156} However, this increases the cost and complexity of an already costly and complex process.

\textsuperscript{153} Friends for All Children v, Lockheed Aircraft Corp., 746 F.2d 816, 820 (D.C. Cir. 1984)(Early on in this long and convoluted case there had been a partial settlement where Lockheed paid $5,000.00 per plaintiff for the infant plaintiffs "medical treatment" and "therapy" or for their litigation expenses. It appears that all of the money was used for litigation expenses, on the assumption that the cases would all settle after the bell weather trials. When this did not occur, the issue of funding for medical monitoring had to be revisited.

\textsuperscript{154} Enterprise Responsibility, supra., 379.


\textsuperscript{156} Id., Chapt. 6.
If medical monitoring is going to be done, it is important that it be done correctly. The testing protocol should not be a replacement for normal regular health care. Additionally, testing should be geared both to the chemicals involved and to their amounts. For example, a protocol designed for an occupational setting, where the levels of exposure are much higher than in the typical toxic tort case would not necessarily be appropriate to screen individuals such as the plaintiffs in a typical groundwater contamination case. This is because normally the levels of exposure are normally much lower when the route of exposure is groundwater.

If sufficient resources are expended on testing, it is almost always possible to find something abnormal, although often what is found will only prove that the test result is indeed outside the normal range. Before medical monitoring can be a practical benefit to the plaintiff it must be shown that the condition for which he is being monitored is one where there is

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158 Id., See also, Cassarett & Doull's Toxicology, The Basic Science of Poisons.


160 I.e. A health benefit to the exposed plaintiff, as opposed to a general gain in societies scope of knowledge about the effects of substance X.
a treatment or cure which depends upon early detection. Also, it must be shown that there is a test that provides reliable early detection.161

Additionally, the adverse effects of screening need to be considered. These include both the risk of false positives (results that suggest an abnormality when there is in fact nothing wrong) and the effect of "labeling" where an individual is perceived (by himself and by others) as "damaged goods." There is also the possibility of "false negative tests" which will give an unwarranted sense of security. To the extent that a testing protocol is not well designed and scientifically valid, these risks are increased.162

The prosecution and defense of medical monitoring claims is extremely fact specific. Even in those jurisdictions that recognize medical monitoring as a valid cause of action, the plaintiff's attorney must be certain to lay all of the necessary foundations, or he will encounter a defense verdict.163 Similarly, even in a jurisdiction such as Virginia or West Virginia that has refused to recognize medical monitoring as different from future medical expenses, the defendant's counsel will have to watch that the plaintiff does


163 Destories v. City of Phoenix, 744 P.2d 705 (Ariz. Ct. App. 1987) (where the plaintiff's medical monitoring claim, though viable as a matter of law was rejected as factually insufficient due to the failure of the plaintiffs to prove the proposed expenses were "reasonably necessary."); Herber v. Johns-Manville Corp., 785 F.2d 79 (3rd Cir. 1986).

164 Ball v. Joy Technologies, Inc. 958 F.2d 36(4th Cir. 1991)( "A claim for medical surveillance costs is simply a claim for future damages.").
not persuade the court to accept a broad definition of injury that includes "subcellular" or "subclinical" injury.165

The one thing about medical monitoring that is assured is that it is an area of the law that rewards the counsel who is well prepared on both the law and the science, regardless of whether he represents the plaintiff166 or defendant.167 It is certain is that a poorly prepared case claiming toxic injury and medical monitoring is unlikely to survive long enough to get to a jury.168


166 Elam v. Alcolac Inc, 765 S.W.2d 42 (Mo. 1988), cert. denied 493 U.S. 817 (1989). A $49,000,000.00 verdict, including $42,000,000.00 in punitive damages on numerous grounds, including medical monitoring. The case settled while on appeal for $6,000,000.00.


168 Id., Carroll v. Litton Systems Inc, 1990 WL 312967 (W.D.N.C. Oct 29, 1990). Although the magistrate gave the plaintiff's attorney in Litton every chance to fix the defects in her case before dismissing it, she was unable or unwilling to do so.

As shown above, and as supported in more detail in the undersigned's Findings of Fact, Part I, and Conclusions of Law, Part II, which are incorporated herein by reference, plaintiffs have failed to establish any admissible evidence on the critical issues already identified by this court: exposure, injury, and medical causation. Without such evidence, their claims for personal injury, increased risk, emotional distress, nuisance, and trespass fail. In addition, plaintiffs have not met the requirements for pursuing actions under either CERCLA or RCRA. The time is now ripe for the

(cont)
court to dismiss this entire case with prejudice.

CHAPTER 3

NOTHING TO FEAR BUT FEAR ITSELF?

Can Persons Exposed to Hazardous Substances Recover for The Fear That They Might Get Sick?

What is Emotional Distress?

Emotional distress is the wide area of damage claims that reflect injuries other than financial or physical. In one sense it even includes the traditional recovery for pain and suffering, as these are injuries in the intangible and emotional sense. However, this not normally what is meant when lawyers, commentators and judges discuss emotional distress. The subject of this section is the emotional distress which, although it may accompany and follow a physical injury, is fundamentally separate and distinct from the physical injury.

Perhaps the simplest way to make this distinction clear is with an illustration. Assume Jane Doe is rolling along on her rollerblades and breaks an ankle because of the negligence of the city in maintaining the sidewalk. The inconvenience and pain she suffers directly as a result of that broken ankle and its treatment would be "ordinary pain and suffering damages," which is to say they would be physically related to the original injury to her ankle. However, if because of that injury Jane became so afraid of developing arthritis in her ankle that she gave up skating and all other forms of physical activity despite the fact that her ankle had completely healed, that

169 See, e.g., The Indianapolis and St. Louis Railroad Co. v. Stables, 62 Ill. 313, 320-21 (1872).
would be an emotional injury. Whether Jane could recover for this injury would depend on its severity and reasonableness,\textsuperscript{170} as will be discussed below.

Emotional distress, as considered by the courts, comes in two main forms; the negligent infliction of emotional distress, and the intentional infliction of emotional distress. Intentional infliction of emotional distress is sometimes called the tort of "outrage".\textsuperscript{171} This paper will be mainly concerned with the negligent infliction of emotional distress. The action for intentional infliction of emotional distress is far more dependent on individual state law determinations and raises issues of both fraud and punitive damages that are beyond the scope of this thesis.

Negligent infliction of emotional distress can be either an independent tort \textsuperscript{172} or an element of damages in ordinary negligence cases.\textsuperscript{173} Regardless of what it is called, the elements or requirements for it differ only in the details. However, in those details lie the distinction between a verdict for the plaintiff and a judgement for the defendant.

\textsuperscript{170} See, Restatement (Second) of Torts, §313, Comment c, which limits the recovery for negligently inflicted emotional distress to those injuries which would be suffered by a more or less normal person, and not one of extraordinary sensitivities. In other words, the "egg shell thin skull rule" does not normally apply in the area of negligently inflicted emotional distress.


\textsuperscript{172} See, George v. Jordan Marsh Co., 268 N.E.2d 915 (1971); Restatement (Second) of Torts, § 46(1).

A Short History of Emotional Distress Damages

It has long been recognized that a person injured because of the negligent or wrongful actions of another can recover not only for his financial losses, but also for the pain, suffering and inconvenience caused by defendant's actions. However, the development of an action (or element of damages) to compensate the plaintiff for fear of injuries that he has not yet suffered and indeed, may never suffer, is a much more recent development.

In toxic tort cases one key question is whether the plaintiff can recover for the emotional distress (fear or apprehension) caused by the awareness of exposure to a hazardous substance. This assumes the substance in question has a capability of causing a harm to them, although it has not yet done so. Though many of the cases have dealt with fear of cancer, the question extends to any future harm such as immune system dysfunctions or other diseases. These are diseases that could be caused by exposure to hazardous substances and which have a long latency period.

175 Terry Morehead Dworkin, Fear of Disease and Delayed Manifestation Injuries: A Solution or a Pandora's Box? 53 Fordham L. Rev. 527 1984).
177 See, e.g. Johnson v. West Virginia University Hospitals, 413 S.W.2d 889 (W.Va. 1991) (suit for fear of AIDS from being stuck with a needle used on a patient infected with HIV); Stephanie B. Goldberg, Aids Phobia, Reasonable Fears or Unreasonable Lawsuits?, ABA Journal, June 1992 at 88.
A Dark, Unreasoning Fear?

Almost everyone is concerned about the risk of cancer, if only in passing.178 The average person is aware of the risk of cancer, but tends not to brood about it too much. However, when an average person is told he has been exposed to a hazardous substance which may increase his risk of cancer, the amount of worry and concern he experiences increases dramatically.179 This is reasonable and perhaps even beneficial, because this concern may lead him to seek information about his condition, and then to perhaps reduce other risk factors.180

That is how a normal person would react. But what about the person who is of a "nervous disposition" and who, at the mention of "the dread specter of cancer"181 becomes completely disabled solely because of emotional reasons?

178 See, Color Additives: Hearings Before the House Comm. on Interstate and Foreign Commerce, 86th Cong., 2d Sess. 115-18 (1960) (statement of Rep. Harris) (noting that "almost everyone[ ] is so conscious of cancer as a dread disease" and hypothesizing that throwing out the Delaney Clause "would create so much fear in the mind of the American people" that they might react against industry); See also, Michael Dore, The Law of Toxic Torts § 7.02[3] (1992); See also, Paul Slovic, Perception of Risk, 236 Science 280 (April 1987).


180 For example both smoking and exposure to asbestos increase the chance of lung cancer occurring in a given individual. However, the increase from a combination of asbestos exposure and smoking is dramatically more than that from either alone. Peter Huber, Galileo's Revenge 154 (1991).

181 Lohrmann v. Pittsburgh Corning Corp., 783 F.2d 1156 (4th Cir. 1986).
Does the traditional rule about the "eggshell thin skull"\textsuperscript{182} apply in the area of emotional distress? The answer is probably not, but it depends on the law of the state in question. Recovery for emotional distress is a question of state tort law, and it is different in each jurisdiction. However, to the extent that there is a uniform source of consensus, it is the Restatement (Second) of Torts, published by the American Law Institute.

One common situation where this problem presents itself is in cases where there is some basis for the fear, but that basis lasts only a short while.\textsuperscript{183} The general rule is that the plaintiff is entitled to recover only for the distress that occurs while there is a reasonable basis for the fear.\textsuperscript{184} This assumes that he can otherwise meet the jurisdiction's requirements for recovery of emotional distress damages.

\textsuperscript{182} The term "eggshell skull," comes from illustrations appearing in English cases where a plaintiff with an "eggshell skull" suffers death as a result of a defendant's negligence where a normal person would only suffer a bump on the head. See, Dulieu v. White & Sons, 2 K.B. 669, 679 (1901); and W. Page Keeton et al., Prosser and Keeton on the Law of Torts § 43, at 292 (5th ed. 1984), (citing Glanville Williams, The Risk Principle, 77 L.Q.Rev. 179, 193-97 (1961)).

\textsuperscript{183} Restatement (Second) of Torts §§ 312, 312. Note that the answer is different for intentional infliction of emotional distress than it is for negligent infliction. If one intends their actions to cause emotional distress to another, and the target is injured by those actions, the actor is liable, even if the harm is far more severe than desired or intended. If A intends only to scare B, and instead causes B who (unknown to A) is very unstable, to suffer severe emotional distress, A is liable for all the results of his intentional acts. On the other hand, if A does not intend to scare B, but does so negligently, A will be liable only to the extent that a reasonable (i.e., "normal") person would have been injured by this negligent action.

\textsuperscript{184} See, Clark v. United States, 660 F.2d 1164 (W.D. Wash. 1987), aff'd 856 F.2d 1433 (9th Cir. 1988); Laxton v. Orkin Exterminating Company, 639 S.W.2d 431 (1982).
This line of reasoning developed out of dog bite cases where the operative fear was that of rabies.\textsuperscript{185} It is reasonable for one who has been bitten by an unknown dog to fear rabies. It is even more reasonable for one who has been bitten by an apparently "mad" dog to have that fear. However, this fear is reasonable only for the time that it is still possible for rabies to appear after a bite. Given what we know about rabies, this is approximately one year.\textsuperscript{186} Beyond that period, the general rule is that claims for damages from fear and emotional distress are treated as unreasonable and noncompensable.\textsuperscript{187} There are two recent cases that have presented this very issue, each arriving at a different conclusion.

The first case was a traditional toxic tort. The defendant was the Orkin Exterminating Company. It was alleged that Orkin had contaminated the water supply of the plaintiff with a hazardous chemical while treating his home for termites.\textsuperscript{188} Once the contamination was discovered the plaintiff both installed a new water system and sought medical care.

After the new water system was installed his doctor told him all tests were normal and that he would have no further problems. The plaintiff later sued and asked for damages for emotional distress based on the fear of future

\textsuperscript{185} Terry Morehead Dworkin, \textit{Fear of Disease and Delayed Manifestation Injuries: A Solution or a Pandora's Box?}, 53 Fordham L. Rev 527 (1984).


\textsuperscript{187} See, \textit{e.g.} Buck v. Brady, 73 A. 277 (Md. 1909); Friedman v. McGowan, 42 A. 723 (Del. 1898); Serio v. American Brewing Co., 74 So. 290 (La. 1917).

\textsuperscript{188} Laxton v. Orkin Exterminating Company, 639 S.W.2d 431 (1982).
The court found that it was reasonable to be concerned and fearful about the future effects of the contamination, but the reasonableness of that fear ended when his physician told him that the blood test levels for himself and his entire family were normal. The doctor also told the plaintiff that they would have no further effects from the exposure.190

The second case reached a different conclusion, although it may be possible to explain this result factually. In Johnson v. West Virginia University Hospitals191 the plaintiff was a security officer at a hospital. He was called to the emergency room to subdue a disruptive and unruly patient. While doing this, he was bitten by the patient who was infected with the AIDS virus. The ER staff knew that the patient was HIV positive,192 but did not tell the security officer. The security officer sued, claiming that he should have been told the patient was HIV positive. He claimed and that if he had been told the patient Was HIV positive he would have used a different approach.

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189 The plaintiff also sought other damages, such as lost property value and past medical care costs, which are not relevant to the question of emotional distress.
190 Laxton, supra.
192 AIDS is short for acquired immunodeficiency syndrome. It is a disease where the human immunodeficiency virus (HIV) attacks the body's immune system and prevents it from functioning properly. See, 36 Morbidity and Mortality Weekly Review 35 (Center for Disease Control, 1987).
in subduing him. Among the elements of damages that he sought, and which the trial court awarded, was $1,900,000.00 in emotional distress because of his "reasonable fear of contacting AIDS."\textsuperscript{193}

At first glance a finding that one who has been bitten by an AIDS infected person has reason to fear the development of the disease does not seem to be out of line. However, there are facts in the record that were ignored by both the jury and the appellate court which cast great doubt on the reasonableness of both the fear and the verdict.\textsuperscript{194} The first is that according to the Centers for Disease Control (CDC) there have been no documented cases of AIDS transmission through biting or saliva. Additionally, according to a CDC report, 95\% of those exposed to HIV will seroconvert\textsuperscript{195} within six months, and it is extremely unlikely that anyone will seroconvert after a year.\textsuperscript{196}

Thus, the case involving a man who was potentially exposed by biting to a disease that is not known for transmission by biting ended in a ruling that unlimited fear was reasonable. However, one who is bitten and thereby exposed

\begin{itemize}
\item[193] Stephanie B. Goldberg, AIDS Phobia: Reasonable Fears or Unreasonable Lawsuits, ABA Journal, June 1992 at 88.
\item[194] Id., Here the West Virginia Supreme Court did not abandon the test that the plaintiff's fear be reasonable. Instead, it merely ignore the evidence that while there was reason to be fearful for a period of time, that to assume that reason continued indefinitely into the future contradicted the weight of scientific knowledge.
\item[195] I.e. develop antibodies to the HIV virus. The standard tests for the AIDS virus do not test for the virus itself, but instead test for the antibodies the body makes in response to the presence of the virus. See, Stephanie B. Goldberg, AIDS Phobia: Reasonable Fears or Unreasonable Lawsuits, ABA Journal, June 1992 at 88; see also, Martha F. Rogers, et al., Lack of Transmission of Human Immunodeficiency Virus From Infected Children to Their Household Contacts, 85 Pediatrics 210 (1990).
\item[196] Goldberg, supra.
\end{itemize}
to rabies, a disease that is known to be transmitted by animal bites can
recover for his fear only for the time that infection is scientifically
likely.\textsuperscript{197} It is possible to explain the apparent inconsistency by the fact
that our knowledge of AIDS and HIV transmission is still developing and less
complete than is our knowledge of rabies.\textsuperscript{198} However it is equally possible
this represents allowing the fears and fads of the general populace to create
liability without regard for any basis in fact or science.\textsuperscript{199}

Thus, we arrive at the key weakness of the attempt to limit the recovery
of emotional distress due to fear of disease to those fears that are
"reasonable." What is "reasonable" is not defined, and may not even be
subject to precise definition. Is a fear based on a widely held, but patently
untrue assumption reasonable? Does it cease to be reasonable when the
plaintiff is informed of the true facts, or would a reasonable man still hold
to superstition and folk wisdom and disregard scientific knowledge? Some
courts have allowed recovery for fears that were irrational, but widely held,
while others have refused to allow recovery on similar facts.\textsuperscript{200} The general
rule is that a plaintiff can recover for fear of future disease only if that
fear is "reasonable."\textsuperscript{201} However, the reality is that reasonableness is a
"question of fact," and in most cases a jury can disregard science in deciding

\textsuperscript{197} \textit{Id.}

\textsuperscript{198} See, Goldberg, \textit{supra.}

\textsuperscript{199} Peter Huber, Galileo's Revenge 130-47 (1991).

\textsuperscript{200} Watson v. Augusta Brewing Co., 52 S.E. 152 (Ga. 1905); Burk v. Sage

\textsuperscript{201} In Re Moorenovich, 634 F. Supp. 634 (D. Me. 1986).
if a fear is reasonable, and the appellate courts are likely to uphold the verdict.202

For an attorney asserting or defending a claim for emotional distress for fear of future disease, the importance of marshaling as much evidence on the reasonableness or unreasonableness of the fear cannot be overemphasized. This is important both for winning the verdict at trial, and for keeping it on appeal.203 Some courts have ruled that the plaintiff's fear will not be considered "reasonable" unless it can be shown that the plaintiff is more likely than not to develop the threatened disease. However this is more of a procedural or evidentiary hurdle, as will be discussed below.


203 Michael Dore, supra. §7.02[3] raises an interesting variation for defending claims for fear of diseases by suggesting that instead of contesting the legitimacy and reasonableness of the plaintiff's fears that the defense should explore the cause of them. Specifically, Mr. Dore recommends inquiring into the sources of the plaintiff's information about the effects of the exposure, and then focusing on those sources of information or misinformation (particularly when they are "grossly inaccurate) as an "unforeseeable superseding cause of the injury, relying on §§ 440, 442 of the Restatement (Second) of Torts. He further suggests that this may leave the defense in the happy situation of trying their case against the "greedy and malicious plaintiff's counsel". I would suggest that when the plaintiff's experts are of the "clinical ecology" school, that the literature and effectiveness of their proposed treatments be carefully reviewed. See, e.g. American Academy of Allergy and Immunology, Position Statement: Clinical Ecology, 78 Journal of Allergy & Clinical Immunology 269 (1986); Abba I. Terr, Environmental Illness: A Clinical Review of Fifty Cases, 146 Arch. of Intern. Med. 145 (Jan. 1986). See also, William H. Armstrong, Tort Damages for Personal Injuries Not Yet Suffered, 3 Nat. Resources and Environment 26 (1988).
Hurdles and Floors

Claims for emotional distress are inherently subjective because the injury cannot be seen. This causes courts to have two interrelated concerns. The first concern is that there will be a flood of new claims, and the second is that many of these claims will be false. There have been a variety of approaches to these concerns, but they can for the most part be divided into two categories, "floors" and "hurdles."

Floors represent the idea that there are certain things that are just too inconsequential to be compensable. This idea is expressed as there is "some level of harm which one should absorb without recompense as the price he pays for living in an organized society." The most common floor is a requirement that the emotional distress be "serious." This is intended to insure the harm is of enough importance to make it worthwhile to invest the court's time to determine if an injury exists, and, if so, what amount of compensation is required. It is thought that this helps to insure that the injury claimed is real.

206 Gilliam v. Stewart, 291 So.2d 593 (Fla. 1974).
207 And by implication the resources society gives to support the courts.
209 Id.
Hurdles are particular requirements of proof a plaintiff must meet before a claim can be considered by the finder of fact. Courts in general are suspicious of claims for emotional distress, and they have been even more so in toxic tort cases. In response to this suspicion, they have traditionally denied recovery where there was no direct physical impact or injury. For example, courts have often required that the plaintiff have a physical injury before they would entertain a claim for emotional distress. This includes the fear of future diseases. The intentional infliction of emotional distress already had its own built-in hurdles because the plaintiff had to prove the defendant's actions where taken with the intention of causing him emotional distress. Because of this built-in hurdle, the physical injury requirement does not usually apply to claims for the intentional infliction of emotional distress.

The requirement that the plaintiff show present physical harm is a real and fairly serious hurdle. Many courts have denied recovery to plaintiffs

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210 Note that some floors, such as a requirement of physical injury before emotional distress can be awarded are also hurdles.


212 Moore v. Allied Chem. Corp., 480 F. Supp. 364 (E.D. Va. 1979) (one of the many cases to arise from the Kepone disaster involving Life Sciences Inc. and Allied Chemical Corp at Hopewell, Virginia); Sypert v. United States, 559 F. Supp. 364 (D.D.C. 1979) (applying Virginia law and holding that physical injury is not a requirement if the defendants actions were willful, wanton and vindictive) and Linker v. Custom-Bilt Machinery, Inc., 594 F. Supp. 894 (E.D. Pa. 1984). See also, The Restatement (Second) of Torts, § 436A.

213 Amendola v. Kansas City Southern Railway Co., 699 F. Supp. 1401 (W.D. Mo. 1988) (This was a case under the FELA, which means that the court was tasked to apply federal common law. See, Atchison, Topeka and Santa Fe Ry. Co. v. (cont)
who could not show sufficient physical harm. Assuming that the plaintiff has to establish present "physical harm" as a threshold for being able to recover damages for the fear of future disease, how severe must that harm be?

The answer to this question breaks the decisions into two groups, those that require only "impact" and those that require "injury." In most jurisdictions that follow the impact rule, merely ingesting the hazardous substance will not be enough to support a claim for emotional distress from fear of future harm, without evidence that some change to the body resulted from contact with the hazardous substance. However, the plaintiff must

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215 For example, in Stites v. Sundstrand Heat Transfer Inc., 660 F. Supp. 1516 (W.D. Mich. 1987) the court required that the plaintiffs would have to show that their alleged ingestion of contaminated water had caused "definite and objective physical injury", but then noted that Michigan courts (the District Court was applying state law in accordance with Erie) have been "very lenient in finding allegations [of physical] harm sufficient."

216 This distinction is clouded somewhat by courts that say they are requiring injury, but then accept "subclinical" or "subcellular" injury where exposure tends to automatically equal injury.

prove only the change occurred, and not that the change was harmful.\textsuperscript{218}

Some courts have developed variations of this theme. For example in\textit{Bennnett v. Mallinckrodt}\textsuperscript{219} the Missouri Court of Appeals required that the plaintiffs show emotional "distress [that] is medically diagnosable and medically significant," although it did not require them to show "contemporaneous physical injury."

Other courts have purported to keep a requirement of physical injury, but have then accepted proof of such slight injuries that they have in fact, if not in name, adopted an "impact" test. For example in\textit{Brafford v. Susquehanna Corp.}\textsuperscript{220} the Federal District Court (applying South Dakota Law) allowed an emotional distress case alleging the defendants had contaminated the plaintiff's home with radioactive residue to go to the jury based on evidence of subcellular harm alone. Some courts have held that "pleural thickening"\textsuperscript{221} alone is enough, without evidence of asbestosis\textsuperscript{222} or other

\textsuperscript{218} See, Plummer v. Unites States, 580 F.2d 72 (3rd Cir. 1978) where the court found that exposure to the tubercle bacteria, as shown by a change from a negative to a positive skin test (for TB immunities) was sufficient to support a claim for emotional distress.


\textsuperscript{220} 586 F. Supp 14 (C.D. Colo. 1984); See also, Anderson v. W.R. Grace and Co., 638 F. Supp. 1219 (D. Mass. 1986) for the requirement that the alleged subcellular harm will have to be proven by "expert medical testimony" based on objective evidence. This of course opens the entire issue of what expert testimony at the frontiers of science should be accepted.

\textsuperscript{221} "Pleural thickening" involves a scarring of the pleura or lining of the lung. Asbestos exposure is only one of several possible causes of pleural thickening; pleural thickening "is highly suggestive of asbestos exposure when other possible causes, such as trauma, surgery, and infection, are excluded." See, AMA Council on Scientific Affairs, A Physician's Guide to Asbestos-Related Diseases, 252 JAMA 2593, 2593 (1984); "Patients with only pleural involvement are usually asymptomatic and have normal pulmonary function," although patients with extensive pleural thickening may have difficulty breathing. Cecil Textbook of Medicine, 2362 (1988).

\textsuperscript{222} Fibrosis of the lungs resulting from the inhalation of fine asbestos dust (cont)
impaired.

On the other hand, some courts have developed variations of the injury test that make it harder for a plaintiff to recover for the fear of future disease. *Rabb v. Orkin Exterminating Co. Inc.* was a suit alleging improper application of a termiticide. The plaintiffs did not offer any proof of the specific disease they feared they were at risk for because of their exposure. As a result of this failure, the court found they had not laid an adequate foundation for the recovery of emotional distress for the threat of future harm.

Still other courts have distinguished between "ordinary fear" which can be shown by lay witnesses, and "cancerphobia" which requires expert testimony. It should be remembered that damages for present psychiatric injuries can be recovered independently from damages for the emotional distress from the fear of future disease or injury.

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and fibers. New American Pocket Medical Dictionary (1978). The term asbestos refers to a group of mineral silicates which have in common a fibrous structure and a potential to be woven. A Physician's Guide to Asbestos Related Diseases, supra.


Other courts have abandoned the fiction of pretending to require proof of physical harm and then allowing evidence of impact to be substituted, by merely requiring the plaintiff to show that their body has been "impacted" by the hazardous substance. For example, in *Herber v. Johns-Manville Corp.*\(^227\) the Third Circuit (applying New Jersey Law) ruled that infiltration of asbestos fibers into the lungs was sufficient impact. The court said there was no requirement to show physical injury before the plaintiff could recover for a fear of cancer. The Florida Court of Appeals reached the same conclusion in another asbestos case in 1985.\(^228\) In a DES case the United States District Court for the Northern District of Illinois decided prenatal exposure to DES\(^229\) satisfied the "physical impact requirement." The Court held that the physical impact need not be contemporaneous with the infliction of the mental distress.\(^230\)

In the next step beyond the impact test, some courts have allowed recovery without proof of present physical injury or physical impact. By this, they have allowed recovery on proof of exposure without any

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227 785 F.2d 79 (3d Cir. 1986).

228 Eagle-Picher Industries Inc. v. Cox, 481 So.2d 517 (Fla. Ct. App. 1985), review denied, 492 So.2d 1331 (Fla. 1986).

229 DES is short for Diethylstilbestrol, or diethyl stilbestrol, a synthetic estrogen which duplicates the actions of natural estrogens. It is used for estrogen replacement therapy, but was formerly used to prevent miscarriage in pregnancy. However, it is no longer used for that purpose due to the possibility that its use caused cancer in the reproductive organs of the children born of these pregnancies. *New American Pocket Medical Dictionary* (1978).

insignificant physical changes as evidence.\footnote{231} However, the line seems to have been drawn at the point of definite exposure. All cases that have sought recovery for the fear of future disease based on only possible exposure have been rejected.\footnote{232}

Another approach to limiting the plaintiff's right to recover for allegations of fear of future harm\footnote{233} requires the plaintiff to show he is more likely than not to get the disease.\footnote{234} This particular hurdle is seen more in the litigation of enhanced risk claims,\footnote{235} but it occasionally

\footnote{231} In Re Moorenovich, 634 F. Supp. 634 (D. Me. 1986); Hagerty v. L \& L Marine Services, Inc., 788 F.2d 315 (5th Cir.), reconsideration denied, 797 F.2d 256 (1986).

\footnote{232} Mergenthaler v. Asbestos Corp. of America, 480 A.2d 647 (Del. 1984), where the wife of an asbestos work attempted to claim based on exposure from washing her husband's clothes. The court rejected her claim on the grounds that there was no proof of exposure. The same result was reached in Rittenhouse v. St. Regis Hotel Joint Venture, 565 N.Y.S. 365 (S. Ct. N.Y. Cty., 1990) where an interior decorator attempted to claim for the fear of future disease based on a possible exposure. Not only was the case dismissed, the attorney was sanctioned for filing a frivolous action, and Cathcart v. Keene Indus. Insulation, 471 A.2d 493 (Pa. Super. Ct. 1984) where a claim that a wife "undoubtedly ingested" asbestos fibers while washing her husband's clothes was rejected because she had no physical manifestations of disease and the court found that "some physical injury or medically identifiable effect is a prerequisite for recovery for emotional distress" in Pennsylvania.

\footnote{233} And thus accomplishing the "getekeeping" function of discouraging minor and fraudulent claims.


\footnote{235} See infra.
appears in fear of disease claims.236

Bystander Recovery

Bystander recovery (viewing the injury of another) for emotional distress is a claim that courts in tort cases have traditionally treated with disfavor.237 Most courts that have considered the issue have rejected claims for bystander recovery of emotional distress in a toxic tort. Thus in *Wieniewski v. Johns-Manville Corp*,238 the survivors of asbestos workers were not allowed to recover for the mental distress caused by "observation of gradual, nontraumatic injury to family members." Likewise, in *Anderson v. W.R. Grace and Co.*,239 plaintiffs were not allowed to recover for witnessing the negligently induced illness of family members, including minor children.240

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236 However, it is a distinctly minority doctrine in this area. See, Sorenson v. Raymark Industries Inc., 756 P.2d 740 (Wash. Ct. App. 1988); Clark v. United States, 660 F.2d 1164 (W.D. Wash. 1987), aff'd 856 F.2d 1433 (9th Cir. 1988); Dartez v. Fiberboard Corp., 765 F.2d 456 (5th Cir. 1985).


238 812 F.2d 81 (3rd Cir. 1987).


240 Id., at 1230; But see, Laxton v. Orkin Exterminating Co. Inc., 639 S.W.2d 431 (Tenn. 1982), where the court found there was "sufficient injury" to the plaintiffs to allow recovery of their concern about themselves and their infant children.
An Emotional Summary

Damages for emotional distress from the fear of future disease represents an important middle ground between medical monitoring and pure recovery for increased risk. They offer the possibility of substantial damages, because unlike medical monitoring they are not limited to the amount of expected future medical testing costs. Furthermore, they are not subject to defense motions requesting the court to use its equitable powers to establish a trust fund instead of just giving the money to the plaintiff outright.

Unlike claims for compensation because of enhanced risk of future disease, the causation hurdle is absent.

One of the elements that the plaintiff has to satisfy is that his fears are reasonable. A major fact that determines both the right to a recovery and its amount is the severity of the fear. This is tied to the reasonableness of the fear. Accordingly, a great deal of evidence about very serious conditions that are possible but not probable can be admitted. This evidence is not relevant to the increased risk cause of action because it deals with events


242 It should be noted that the general tort reform statutes in some states will limit the plaintiff's recovery for non-economic damages however, and may in some cases require periodic payment of damages. See Generally, David Lousiell and Henry Williams, Medical Malpractice Chapt. 18, Appendix A (1989, 1992).

243 Except in the minority of jurisdictions that require the plaintiff to show it is more likely than not that they will get the disease before they will allow compensation for the fear of that disease. See, In Fear of Cancerphobia, supra.
that are not more likely than not going to occur. It can, however, be admitted for the purpose of showing the reasonableness and basis for the plaintiff's claims of fear.
The concept of a claim for increased or enhanced risk of disease, though mostly disfavored by the courts, has a history that goes back at least as far as 1930. There, in Coover v. Painless Parker, Dentist246 the California Court of Appeals held that a patient who had suffered burns to her face because of an overexposure to x-rays could recover for the increased likelihood that she would develop cancer. This case was a very early one, and in most senses an aberration that would not lead anywhere for two generations. The elements of the cause of action as set forth in Coover have not changed much in the intervening 63 years; it is the traditional tort liability rule of duty, breach, injury and causation, with a definition of injury that considers a present risk of future injury to be the equivalent of the present injury itself.247

244 The terms increased risk and enhanced risk are used interchangeably in the cases and the literature. Here I will use the term "enhanced risk" to mean either, except in when in quotations were I will use the form chosen by the source being quoted.


246 105 Cal. App. 110, 286 P 1048 (1930)

Some courts have gone half way to recognizing the idea of increased risk as a tort by allowing an increased risk claim if there is present injury. This is a halfway point between future consequences of present injuries (a well recognized, if sometimes factually suspect form of personal injury damages) and true recovery for the increased risk of injuries that the plaintiff does not currently have.

What is Enhanced Risk?

The law is a system dependent upon words and the meanings given to them. A term as used in the law may or may not mean the same thing that it would mean when used in ordinary conversation. The term "enhanced risk" (which

248 Note that Coover, supra. was also a case where there was an existing physical injury, and thus not a pure "enhanced risk" case.

249 See, e.g. Amendola v. Kansas Southern Ry. Co., 699 F. Supp. 1401 (W.D. Mo. 1988); Donald F. Pierce, Recovery for Increased Risk of Developing a Future Injury From Exposure to a Toxic Substance, 19 Envtl. L. Rep. (Envtl. L. Inst.) 10256, 10257 (1989). According to Pierce, the weakness of this line of reasoning, beyond a certain ease in sorting out the more serious of cases, is that there may not be any direct connection between the present injury that qualifies the plaintiff for damages (for example asbestosis) and the threatened more serious disease (cancer).


252 As is shown by the RCRA (Resource Conservation and Recovery Act) definition of a solid waste that includes both liquids and gases within the definition of a "solid waste." 42 U.S.C. 6903(27); See also, Walter Wheeler Cook, Substance and Procedure in the Conflict of Laws, 42 Yale L.J. 333, 337 (1933), "The tendency to assume that a word which appears in two or more legal rules, and so in connection with more than one purpose, has and should have precisely the same scope in all of them, runs all through legal discussions. (cont)
also includes "increased risk") is defined as "the increased risk of developing a disease in the future as a result of the defendant's conduct." 253

Damages for increased risk of future disease are related to damages for emotional distress based on the fear of future disease, but they are separate and distinct from emotional distress. Fear of cancer damages compensate for something that has already happened which causes fear in the plaintiff. Although it may not be possible to see or otherwise independently verify its existence, fear is a consequence of a past event. When seeking damages for the increased risk of future disease, plaintiffs want compensation for something that has not yet and may never happen. 254 For a tort system where injury was always the starting point 255 and the anchor around which all else

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It has all the tenacity of original sin and must constantly be guarded against."


A tortious cause of action accrues when the victim suffers harm caused by the defendant's wrong. The injury or harm may occur simultaneously with the tortuous conduct in the case of a traumatic event or the injury may be latent and may not manifest and discovered until some later date. When the fact of the injury does occur, if discovered by the victim, the cause of action accrues. The victim is then entitled to sue for his damages, past and present, as well as his probable future damages, and limitations also begins to run the time within which suit may be instituted. The victim is entitled only to

(cont)
revolved, this is a major disruption in the intellectual framework. If a cause of action for the infliction of enhanced risk of future disease is recognized, what are the elements that the plaintiff must prove to recover? As enhanced risk is a cause of action sounding in negligence, the plaintiff must prove duty, breach, injury and causation. Assuming there is a duty not to unknowingly expose unwilling individuals to hazardous substances, duty is easily established. Obviously, if these chemicals escape into the environment and members of the public are thereby exposed to them, this duty is breached. Thus we arrive at the real questions:

(1) does the plaintiff have an injury, and if so,

(2) were the defendant's (or defendants' for these are often multiparty lawsuits) actions the proximate cause of this injury?

The unique elements of enhanced risk are all about a different way of showing that the plaintiff indeed has an injury, and that the defendant caused this injury by his negligent use or release of hazardous substances.

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one cause of action and, if his injuries subsequently worsen, he has no further opportunity for recompense.

See also, Hagerty v. L & L Marine Services, Inc., 788 F.2d 315 (5th Cir. 1986), a Jones Act (FELA) case decided under Federal common law which denied recovery for increased risk in the absence of present injury, although the court allowed the plaintiff compensation for future medical monitoring expenses and fear of future disease; Martin v. Johns-Manville Corp., 494 A.2d 1088 (Pa. 1985), where the Pennsylvania Supreme Court denied recovery for the cause of future cancer in the absence of present injury.


257 Restatement (Second) of Torts, § 281.
The first element of an enhanced risk is proving exposure to an allegedly toxic substance. This may sound basic, but proving exposure is not always easy. It can be particularly difficult when the exposure is alleged to have occurred at low levels over a long period of time, and the substance was not one (like asbestos) which leaves a permanent marker of its presence. An additional complicating factor is showing that the plaintiff has not been exposed to other unrelated hazardous substances. Otherwise, the defense can claim that those unrelated substances caused of the plaintiff’s condition, rather than those substances allegedly released by the defendant.

First, the plaintiff must show the condition he suffers from is one which would not occur but for the presence of the hazardous substance. It may be sufficient to show that the condition would not occur in the manner and numbers that it is now appearing but for the exposure to a hazardous substance. However, that does not prove that his condition is occurring because of the presence of the defendant’s hazardous substance. To prove this, the plaintiff must eliminate all other potential sources.

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258 Adams v. Clean Air Systems, 586 N.E.2d 940 (Ind. Ct. of App. 3rd Dist. (1992), where the Indiana Court of Appeals denied recovery based on possible, but not proven exposure.


The third, and largest, barrier to recovery faced by the toxic waste victim today is the burden of proving causation. That burden is (cont)
Plaintiff must next prove that the substance or substances that he was exposed to are toxic. Proof of human toxicity, particularly at low levels of exposure over time, is not easy, and major cases have failed to overcome this hurdle. 262

The final thing that the plaintiff must show to establish the action for enhanced risk is that the toxic substance to which he has been exposed will "more likely than not" cause him to develop the harm that he claims to be at risk for. 263 This is the toughest hurdle that the plaintiff's case must

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twofold, requiring that the victim identify both the hazardous substance that caused her injuries (medical causation) and the defendant responsible for discharging that substance (legal causation). To demonstrate medical causation, a plaintiff must be able to prove that her injury resulted from exposure to a toxic waste substance rather than from the 'background risk' - the unknown causes of a disease that everyone faces. Unless the injury is a disease commonly linked with a specific agent (for example, asbestosis and asbestos), proving medical causation is both difficult and expensive. Demonstrating legal causation is equally difficult because dozens of generators typically store substances at any given waste site, and the site itself may have been owned by several successive parties.

[footnotes omitted]


263 In Re Agent Orange Product Liability Litigation, supra.; Hagerty v. L & L Marine Services Inc., 788 F.2d 315,319 (5th Cir. 1986). The standard for determining if the plaintiff has shown the disease was "more likely than not" the result of the hazardous substance exposure is usually "reasonable medical certainty." This is most often interpreted as requiring a greater than 50% chance of the plaintiff actually getting the disease which they are claimed to be at risk for. See, Gideon v. Johns-Manville Corp., 761 F.2d 1129, 1138 (applying Texas law); Amendola v. Kansas Southern Ry. Co., 699 F. Supp. 1401, 1401 (W.D. Mo. 1988), a FELA case collecting and discussing enhanced risk cases, and deciding that there could be no recovery for enhanced risk of future injury without proof of present injury.
clear, and the one upon which the outcome of most cases eventually turns.264

Commentators have divided the results of the various courts' causation determinations into two versions, "strong" and "weak."265 The "weak" version allows a plaintiff to survive summary judgment or directed verdict if he has presented statistical evidence that the probability of harm to any person exposed to substance X is greater than 50%.266 The "strong" version requires both the statistical evidence that the probability of harm to any person exposed to substance X is greater than 50% and some evidence that the plaintiff will be in the group that gets the disease. If the chances of the plaintiff developing the disease in question are less than 50%, he cannot recover under either version of the more likely than not test.267 In nearly all cases, providing evidence of the plaintiff's chances of actually getting the disease, and of the toxicity of substance(s) will require expert testimony.268 This will lead to questions about the qualifications of an

264 At least from the appellate cases - since only those cases that are close and can pass the tests of exposure and toxicity reach the question of causation.


266 See, Dartez v. Fiberboard Corp., 765 F.2d 456, 466 (5th Cir. 1985).


expert and how far from "the mainstream" should courts go in allowing parties to present novel scientific theories.\textsuperscript{269} This is beyond the scope of this paper, and has been alluded to previously.\textsuperscript{270}

\textbf{The Single Action Rule}

The necessity for the development of the doctrine of increased risk lies with the traditional rule that a plaintiff is required to bring all of his claims against a defendant in a single action.\textsuperscript{271} That rule is one of judicial economy and finality. It made a great deal of sense when the means of causing injury were limited to simple ones such as run away horses or poorly controlled automobiles. One of the major purposes of the civil justice


\textsuperscript{270} It should be noted that a few courts have departed from the majority rule and allowed recovery for the increased risk of future disease when the odds of the claimant getting the disease is less than a probability (50\%). \textit{See}, \textit{e.g.}, Valori v. Johns-Manville Sales Corp., No. 82–2686, slip op., 1985 WL 6074 (D.N.J. Dec. 11, 1985); Brafford v. Susquehanna Corp., 586 F. Supp. 14 (D. Colo. 1984), (applying South Dakota law) where the court allowed recovery for future risk of cancer after finding that they had "suffered a definite, present physical injury" in the form of subcellular damage to chromosomes; Depass v. United States, 721 F.2d. 203 (7th Cir. 1983), where again after a finding of present physical injury the court allowed a recovery for other, unrelated possible future harm.

\textsuperscript{271} David P.C. Ashton, Comment, \textit{Decreasing the Risks Inherent in Claims for Increased Risk of Disease}, 43 U. of Miami L. Rev. 1081 (1989). In his comment Mr Ashton discussed other problems with waiting for the actual appearance of the disease before deciding whether or not to award damages for it, such as loss of evidence over time and the possibility that the defendant may have become insolvent by the time the disease actually occurs. He also argues that delaying the payment of damages until it is determined whether or not the plaintiff will suffer the injury will lessen the deterrent effect of being held liable.
system is to resolve disputes. To accomplish that task it is necessary that the disputes, once resolved, stay that way. One way of accomplishing this was to create what is known as the "single action rule." This rule requires that the plaintiff bring all of his complaints with the defendant regarding a single incident to the court at one time. The natural effect of this rule is that if the plaintiff, for whatever reason, does not recover all of his damages in the initial suit, then those losses go uncompensated.

In the balancing of the interests of finality and judicial economy against those of accurate and full compensation, this was felt to be an acceptable compromise. However this was not an absolute rule, and over time exceptions began to develop. The exceptions first developed in response


273 Jack H. Friedenthal et al., Civil Procedure § 14.3 (1985), "Concern for finality manifests itself in various legal rules. Most notably, in the trial setting, statutes of limitation and repose, and doctrines of issue and claim preclusion reflect the law's valuation of closure in legal disputes and a related concern to protect settled expectations."

274 Which is also known as the "rule against splitting causes of action.

275 Restatement (Second) of Torts § 910.

276 W. Page Keeton et al., Prosser and Keeton on the Law of Torts § 30 (5th ed. 1984), "The victim is then entitled to sue for his damages, past and present, as well as his probable future damages, and limitations also begins to run the time within which suit may be instituted. The victim is entitled only to one cause of action and, if his injuries subsequently worsen, he has no further opportunity for recompense."

277 See, Restatement (Second) of Judgements § 26. See also, Rosenthal v. Scott, 150 So.2d 433 (Fla. 1961), rev'd on rehearing, 150 So.2d 436 (Fla. 1963) where the single action rule was held not to bar a suit for personal (cont)
to unique situations where procedural rules or practical realities caused the
different injuries from the same incident to have been handled separately, and
the court was persuaded that an injustice would result if relief were not
granted.278

One common area where the rule began to break down was auto accidents.
The property and personal injury portions of the claim arise from the same set
of facts (i.e. the accident). However, the evaluation of damage to an
automobile is much easier than evaluation of injuries to a human.
Furthermore, in many cases the real party in interest on the property damage
was the injured person's insurance company who paid for the property damage
under the collision coverage provisions of the policy. In these cases that
balance of equities shifted, and the acceptable compromise became
unacceptable.279

The weakness of the "single cause of action rule" is that when combined
with the more likely than not rule for future injury, it wipes out the
plaintiff's right to recover for his injuries before he is aware of those
injuries. Unless one either accepts the proposition that increased risk is
itself an injury that can and should be compensated (a proposition that has

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injuries, despite the fact the plaintiff had already sued for property damage
from the same accident; Eagle-Picher Industries Inc. v. Cox, 481 So.2d 517
(Fla.App. Dist. 3. 1985), allowing a later action if and when asbestos
exposure victim develops cancer.

278 Id.; See also, Almertoh v. Government Employees Insurance Co., 587 So.2d

279 Emmco Ins. Co. v. Bankston, 163 So.2d 24, 26 (Fla.3d Dist.Ct.App. 1964),
"[it] is not unjust to the wrongdoer, who is thereby required to pay only the
full amount for which he is liable because of his wrong or tort."
been rejected by most courts that have considered it, or allows relief from the requirement that all injuries from one incident must be recovered in a single lawsuit, the right to recover for a future injury is wiped out before it exists. Sometimes the right to recover is lost before the injury that underlies it has occurred.

One common scenario of this situation is a case based on exposure to airborne asbestos fibers. Over time, exposure to a sufficient quantity of asbestos fibers first leads to pleural thickening, a diagnosable but usually condition involving changes to the lung's lining. Eventually a certain number of those exposed to asbestos will develop a more serious and disabling condition called asbestosis. Of those who develop asbestosis many will go on to develop some form of lung cancer. However, the progression from one condition to the next is neither certain nor predictable. It cannot be said with certainty that an individual who has pleural thickening will develop asbestosis. Likewise, it cannot be said that a given individual with asbestosis will develop cancer. Even if one accepts the studies that give a higher number for the chance of asbestosis being followed by cancer,


281 However, patients with extensive pleural thickening may have difficulty breathing. Cecil Textbook of Medicine, 2362 (1988).

282 AMA Council on Scientific Affairs, A Physician's Guide to Asbestos-Related Diseases, 252 JAMA 2593, 2593 (1984); "Patients with only pleural involvement are usually asymptomatic and have normal pulmonary function."

283 Fibrosis (i.e. scaring) of the lungs resulting from the inhalation of fine asbestos dust and fibers. New American Pocket Medical Dictionary (1978).

284 Between 40 and 50%, depending on which studies you believe.
and is able to control for external factors such as tobacco use, it is still not certain that this individual will develop cancer. However, recovery is frequently allowed once the greater than 50% threshold has been met.285

However, in the average case the plaintiff cannot meet the "more likely than not" burden. This is because either the experts on both sides place the odds of injury at less that 50%, or because the plaintiff's experts are unwilling to quantify (i.e., assign a percentage of occurrence number) to the plaintiff's chance of developing cancer.286

If the plaintiff has pleural thickening or asbestosis but has not yet developed cancer, he cannot recover for cancer, unless he can prove it is more likely than not that he will get the cancer.287 If the plaintiff was aware of the injury and its cause at the time the asbestosis was diagnosed (if not sooner), the statute of limitations will run from the time the plaintiff was told he had asbestosis. This will be so even under a modern "discovery rule" type of situation, as the plaintiff will have had knowledge of both the injury and its cause.288


The general rule is that where it is established that future consequences from an injury to a person will ensue, recovery may be had, but such future consequences must be established on terms of reasonable probabilities.


287 Dartez v. Fiberboard Corp., 765 F.2d. 456 (5th Cir. 1985).

288 Id.
If he files suit when the asbestosis is diagnosed, he will be unable to obtain compensation for the most serious of his potential damages (cancer) because it is not certain he will ever develop it. The other choice is to wait and see if he develops cancer. However, if that it does not by happenstance occur during the period between when the plaintiff is told of his exposure and the time the statute of limitations runs out, the statute will bar the suit, because the statute of limitations began running when the plaintiff knew of the injury - i.e. when he was told of the pleural thickening or asbestosis.

Thus, the potential plaintiff is faced with a choice between an inadequate recovery if he sues now, and no recovery if he waits. This absurd result becomes even more ludicrous in the few states that have not adopted some form of a "discovery rule." In those states the statute of limitations for a toxic exposure is likely to have run before the potential plaintiff is even aware that an exposure has occurred.

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289 Statutes of limitation for personal injury tend to be fairly short. For example in Virginia the statute of limitations for personal injury is two years (Va. Code, § 8.01-243), while in California it is only one year (Cal. Code Civ. Pro. § 340).


291 So that the statute of limitations runs from the discovery or detection of the condition and not from the exposure to the risk. W. Page Keeton et al., Prosser and Keeton on the Law of Torts §30 at 166 (5th ed. 1984).

As Charles Dickens's Mr. Bumble observed, the law may on occasion be an ass, but the judges who make and interpret the law are seldom happy with that state of affairs. Some courts have been willing to live in what Judge Frank called "topsy-turvy land" and thereby deny recovery to a plaintiff who brings his action now, on the grounds that it is not yet ripe, and yet they also acknowledge that if the plaintiff had waited so as to be able to

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ruled that a statute of limitations begins to run only when a diagnosis of cancer was confirmed, and not when the plaintiff became suspicious and fearful that she might have cancer.

293 Charles Dickens, Oliver Twist, ch. 51, in I, The Works of Charles Dickens (London, New York: The Waverly Book Company, Cassell & Company, Limited, 1890), pp. 317-318, "If the law supposes that, said Mr. Bumble * * * the law is a ass--a idiot."


Except in topsy-turvy land you can't die before you are conceived, or be divorced before ever you marry, or harvest a crop never planted, or burn down a house never built, or miss a train running on a non-existent railroad. For substantially similar reasons, it has always heretofore been accepted, as a sort of legal 'axiom,' that a statute of limitations does not begin to run against a cause of action before that cause of action exists, i.e., before a judicial remedy is available to the plaintiff. For a limitations statute, by its inherent nature, bars a cause of action solely because suit was not brought to assert it during a period when the suit, if begun in that period, could have been successfully maintained; the plaintiff, in such a case, loses for the sole reason that he delayed- beyond the time fixed by the statute- commencing his suit which, but for the delay, he would have won. As the Connecticut Supreme Court has said, the policy behind a limitations statute is that of penalizing one who "sleep(s) upon his rights". But no student of such legal somnolence has ever explained how a man can sleep on a right he does not have. [Footnotes Omitted]

295 I.e., it is not yet known if he is going to develop cancer.
meet this requirement his claim would be barred by the statute of limitations.296

Other courts (and what is by now the emerging majority) have chosen to find a way to avoid this nonsensical result.297 Some have done this by relaxing the more likely than not requirement for future injury,298 but more have done so by modifying, weakening or creating an exception to the rule against splitting causes of action.299 Though varied, the intellectual justifications for this are usually fact specific. A common finding is that asbestosis and asbestos related cancer are separate and distinct disease processes.300 Accordingly, it is not reasonable to expect the plaintiff to


300 Devlin v. Johns-Manville Sales Corp., 495 A.2d 495 (N.J. Super. Ct., Law Div. 1985); See also, Goodman v. Mead Johnson & Co., 534 F.2d 566 (3rd Cir. 1976), cert. denied 429 U.S. 1038 (1977) where the court held that thrombophelebitis of the leg and cancer of the breast where not the product of the same chain of causality, even if both where related to the plaintiff's use of the defendant's oral contraceptives.
bring an action for damages that he has not yet suffered. In fact, some courts have noted that a requirement that the plaintiff bring all possible claims in a single action is contrary to judicial economy.\textsuperscript{301} This is because a plaintiff in a "single action" state is faced with the certain loss of his rights to recover if he does not file suit. He will thus be forced to attempt to litigate the issue of future cancer at the early signs of injury, instead of waiting to see if the cancer actually develops as feared. Plaintiffs may lose most of the claims, but would probably win enough of them to cause the actions to continue.\textsuperscript{302} One chance in five may not sound like good odds, but it beats no chances in ten every time.

Although the examples and cases cited have all involved asbestos, the same reasoning will apply to any case involving similar injuries. The effects of asbestos on humans are better understood than that of many other substances because of the large number of victims suffering from asbestos related injuries.\textsuperscript{303} The reasoning process in other cases is the same, although the analysis may be less accurate due to the lack of complete information.

\textsuperscript{301} Eagle-Picher Industries Inc. v. Cox, \textit{supra}.

\textsuperscript{302} \textit{Id}.

\textsuperscript{303} For example, numerous books and journal articles have been published on the medical and legal aspects of asbestos. See, \textit{e.g.} B. Castleman, Asbestos: Medical and Legal Aspects (2d ed. 1986) and AMA Council on Scientific Affairs, \textit{A Physician's Guide to Asbestos-Related Diseases}, 252 JAMA 2593, 2593 (1984), a situation that has not occurred for most other hazardous substances.
Allowing a modification of the "single action rule" makes intellectual and logical sense in the area of latent injuries from hazardous substances. It avoids ridiculous, absurd and unjust results, and fosters wise use of limited judicial resources. Despite the arguments in favor of allowing relief from the single action rule, the changes have not been universally adopted. Several major states have rejected the idea of allowing relief from the rule. Chief among these states are Texas and Pennsylvania.

Summary of Increased Risk

Increased risk claims remain an area of controversy and development in toxic tort law. This is in part because tort law is a business, and a business runs on money. Damages for increased risk have the potential to be big damages, and one third of a large award is much more pleasing to an

306 Major both in terms of population size, as well as in having a large number of tort cases involving exposure to hazardous substances due to their large industrial economies.
attorney working on a contingent fee than is one third of a small award. Furthermore, unlike medical monitoring damages, these damages will be paid in a lump sum.

This must be contrasted with the problem that toxic tort cases are hard to prove in most circumstances,\textsuperscript{310} and claims for increased risk are tougher still.\textsuperscript{311} Although the commentators who write about toxic tort law are intrigued with the idea of an enhanced risk remedy or cause of action, judges and legislators are not.\textsuperscript{312} Unless the plaintiff can prove that he is more likely than not to get the threatened disease than not, he is unlikely to recover for the increased risk. However, substantial risks less than a probability\textsuperscript{313} will provide excellent support for a cause of action based on fear of future disease, as discussed earlier. Furthermore, if the plaintiff's condition in fact merits special monitoring, relief may be available under the cause of action for presymptom medical monitoring, as was also discussed earlier.

\begin{itemize}
\item \textsuperscript{310} American Law Institute, Enterprise Responsibility for Personal Injuries, Vol. 1, 320 (1991).
\item \textsuperscript{311} Michael Dore, The Law of Toxic Torts § 7.07 (1992).
\item \textsuperscript{312} Id., fn. 24. See also, David S. Pegno, An Analysis of the Enhanced Risk of Action (Or How I Learned to Stop Worrying and Love Toxic Waste), 33 Vill. L. Rev. 437 (1988).
\item \textsuperscript{313} I.e., more likely than not, usually defined as greater than 50%.
\end{itemize}
CHAPTER 5

DO ENVIRONMENTAL STATUTES PROVIDE ANOTHER BASIS FOR THE RECOVERY OF DAMAGES TO AN EXPOSED INDIVIDUAL?

In addition to the various common law theories of recovery used to gain compensation for individuals exposed to toxic or hazardous substances, there are many environmental statutes passed in the last 20 years that provide a variety of possible remedies. However, with one possible exception, these available remedies do not include the right to seek personal injury damages. The one exception is that it may be possible, in exactly the right circumstances, to seek medical monitoring costs under CERCLA or perhaps even RCRA.

As a rule, the private rights of action under the environmental statutes (also known as "citizen suit" provisions) are limited to seeking injunctive relief, and in certain cases, fines and penalties which are paid to the

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315 See, e.g., Adams v. Republic Steel Corp., 621 F. Supp. 370 (D. Tenn.) No private right of action for damages under Clean Air Act or the Toxic Substances Control act); Sanford Street Local Development Corporation v. Textron, Inc., 768 F. Supp. 1218 (W.D. Mich. 1991) not only is there no private right of action under TSCA, but a violation of TSCA can not even be used to establish negligence per se under state tort law, as this would allow by indirection what the Congress had chosen to deny by direct Federal action.

316 The Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. 9607 et seq. (called such despite the fact that it is not comprehensive and often times provides for no compensation).

317 The Resource Conservation and Recovery Act, also known as the Solid Waste Disposal Act, 42 U.S.C. 6901 et seq.
government. Furthermore, most of these provisions\textsuperscript{318} have been interpreted so that the grant of the explicit private right of action under the "citizen suit" provisions for injunctive relief bars any implied right of action for other purposes.\textsuperscript{319}

An additional limitation on most of these statutory provisions is provided by the decision of the United States Supreme Court that citizen suits under the Clean Water Act\textsuperscript{320} cannot be for entirely past violations.\textsuperscript{321} RCRA has similar language, and courts have interpreted the citizen suit provisions of RCRA to bar actions for entirely past violations.\textsuperscript{322}

## Medical Monitoring Under RCRA

RCRA is a statute which deals with the production and disposal of hazardous materials in ongoing facilities.\textsuperscript{323} It is commonly described as a

\textsuperscript{318} Which tend to be very similar to each other.

\textsuperscript{319} Middlesex County Sewerage Authority v. National Sea Clammers, 453 U.S. 1 (1981).

\textsuperscript{320} 33 U.S.C. § 1251 et seq.

\textsuperscript{321} Gwaltney of Smithfield v. Chesapeake Bay Foundation, Inc. 484 U.S. 49 (1987).


"cradle to grave" regulatory system for hazardous substances.\textsuperscript{324} While CERCLA deals primarily with past contamination, RCRA deals primarily with current operations. Thus, RCRA's regulatory outlook is proactive rather than reactive.\textsuperscript{325} RCRA has "corrective action" provisions that are intended to deal with past contamination of sites that continue to operate under its regulation. However, these provisions are narrower in reach and application than the similar provisions of CERCLA.\textsuperscript{326}

There is no doubt that medical monitoring of an exposed population could be ordered by the Administrator\textsuperscript{327} or a state with an authorized RCRA program as a part of the corrective action requirements of RCRA.\textsuperscript{328} However, 


\textsuperscript{325} Id.

\textsuperscript{326} See, e.g. 42 U.S.C. § 6939a (providing for health assessments at landfills and surface impoundments) and 42 U.S.C. § 6924 (dealing with the general power of the EPA Administrator to require corrective action by permitted facilities, including the authority to require that corrective action extend beyond the premises of that facility unless the adjoining landowner refuses to permit it).

\textsuperscript{327} Meaning the Administrator of the Environmental Protection Agency, 42 U.S.C. 6903(1), or such person as he may properly delegate that authority.

\textsuperscript{328} Id. The monitoring would be accomplished by the Administrator (of EPA) requesting that the Agency for Toxic Substances and Disease Registry (ATSDR) conduct a preliminary health assessment, to be followed by "full scale health and epidemiological studies and medical evaluations" if indicated. This is the same monitoring scheme required for a CERCLA site, only the means of arriving at it was through RCRA and the corrective action rules.
it does not appear that the citizen suit provisions of RCRA\textsuperscript{329} are broad enough to give private litigants the right to demand medical monitoring except in the most limited of circumstances.\textsuperscript{330}

In the only reported case where medical monitoring was sought under RCRA, it was denied on a summary judgement motion. However, this may have been because the proposed relief was structured as a sum of money to be taken by the plaintiffs and used for their future medical monitoring.\textsuperscript{331} The court said if the circumstances were different that it might consider the medical monitoring remedy under RCRA. However, it was not going to give a pot of money to the plaintiffs without control over how it was to be spent and call that "injunctive relief."

In a case where a number of persons are exposed to a toxin about which little is known, and it is necessary to gather and share information regarding diagnosis and treatment through screening, the Court would consider framing a medical monitoring and information sharing program as injunctive relief.

Such is not the case here. Plaintiffs' experts generally aver that the consequences of exposure to TCE are harmful, are known, and are capable of proof...... It appears that the primary purpose of the medical monitoring fund proposed by plaintiffs is to screen for early signs of the numerous diseases already associated with

\textsuperscript{329} 42 U.S.C. § 6972.

\textsuperscript{330} See, McGregor v. Industrial Excess Landfill Inc., 709 F.Supp. 1401, (N.D. Ohio 1987) where the court held that under 42 U.S.C. 5972 a citizen suit under RCRA is possible only when the state and Federal authorities have not acted and notice has been given to the Administrator of EPA 60 days before filing suit. According to 42 U.S.C. §6939a(c) members of the public "may submit evidence of releases of or exposures to hazardous constituents" to the Administrator of ATSDR, the Administrator of EPA or to a state with an authorized RCRA program, but they can not demand that any particular action be taken based on that information.

\textsuperscript{331} Werlein v. United States, 746 F. Supp. 887 (D. Minn. 1990).
exposure to TCE. The proposed monitoring fund contains no provisions for anything besides an exchange of money. It cannot be authorized as injunctive relief. 332

In summary, the circumstances where medical monitoring would be available under RCRA are limited to those situations where the EPA, or perhaps a judge, 333 sees it as necessary to properly assess the effect of the chemical exposure on the public at large. If the relief is awarded it will be in the form of a court supervised fund, or it will be conducted by a public agency. 334

Medical Monitoring Under CERCLA

Congress passed CERCLA with a different set of goals and objectives in mind than it had when it passed RCRA 335. While RCRA is intended to prevent

332 *Id.*, a p. 895.

333 Section 7002 of RCRA (42 U.S.C. 6972) is a citizen suit provision that allows "any person" to file a suit against a defendant who is "alleged to be in violation of any permit, standard, regulation, condition, requirement, prohibition, or order which has become effective pursuant to this chapter." If the plaintiff alleges that the monitoring provisions of Section 3019 of RCRA (42 U.S.C. 6939a) where not complied with by the applicant in his permit application, the plaintiff could have a cause of action against both the applicant and the Administrator. Similarly, if the monitoring provisions where included in the permit but were not being enforced, the plaintiff could have a viable cause of action under RCRA. This of course assumes that the other procedural hurdles of no state or Federal enforcement actions and 60 days notice are complied with. See, 42 U.S.C. 6972(b) and (c). See also, McGregor v. Industrial Excess Landfill Inc., *Supra.*

334 It should be noted that a court supervised fund is what the court in *Ayers v. Jackson Township*, 525 A.2d 287 (N.J. 1987) was the preferred way of handling medical monitoring awards. *Ayers* is probably the leading case on common law medical monitoring.

335 CERCLA's primary purpose is "to facilitate the prompt cleanup of (cont)
disasters before they happen by regulating ongoing operations, CERCLA is intended to deal with closed or abandoned sites of hazardous chemical releases. However, the text of both statutes is less than a model of legislative clarity, and the legislative history is uncertain at best. The reality is that the CERCLA statute is a product of legislative gamesmanship. It is the product of a last minute deal where no one got what they wanted going in, but almost everybody involved got something.

As proposed, CERCLA was to be a comprehensive response to the leakage of hazardous substances into the general environment, but most of this was cut out as the various interests fought over the contents and fate of the bills. When first introduced, the bills that later became CERCLA provided for a distinct and independent Federal cause of action for personal injuries caused by exposure to hazardous chemicals. However, during the legislative process, the scope of CERCLA was narrowed to focus on the clean-up of abandoned hazardous waste sites by placing the ultimate financial responsibility for cleanup on those responsible for the hazardous wastes. Walls v. Waste Resource Corp., 761 F.2d 311, 318 (6th Cir.1985).

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337 For example, the 10th Circuit made reference to CERCLA's "notorious lack of clarity." Daigle v. Shell Oil Co., 972 F.2d 1527 (10th Cir. 1992).


340 The 96th Congress fully considered three major hazardous substance
process of give and take, those provisions where removed. While this compromise removed the ability to recover general personal injury damages under CERCLA, it did not completely settle the question of whether or not a court could award medical monitoring in a CERCLA action. This is because CERCLA gives private litigants the right to recover "response costs" from the party or parties that caused the release of the hazardous substance into the environment. An argument can be made that, at least in some circumstances, medical monitoring is a response cost.

Before an injured party can recover response costs they must show that the costs are "consistent with the National Contingency Plan." In cleanups directed by a governmental agency, the government need prove only

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response bills, H.R. 85, H.R. 7020, and S. 1480 in addition to a Carter administration bill which died in Committee. See 1 The Environmental Law Institute, Superfund: A Legislative History xiii(1983).

341 Senator Jennings Randolph of West Virginia was cosponsor of one of the bills that became CERCLA, and he expressly acknowledged the intentional deletion of any private cause of action for personal injury; the Senator stated that "[w]e have deleted the Federal cause of action for medical expenses or income loss." 126 Cong. Rec. S 14964 (daily ed. Nov. 24, 1980), reprinted in Superfund: A Legislative History, Vol. II, 260. Given Senator Randolph's status as a cosponsor of the compromise bill, courts have found his statements a reliable indicator of Congressional intent to exclude "medical expenses" from recovery. This is particularly so since the Senate passed the bill the same day the remarks were made, and the full Congress approved it two weeks later. Patricia A. Shackelford, Comment, Easing the Credit Crunch: A "Functional" Approach To Lender Control Liability Under CERCLA, 19 B.C. Envtl. Aff. L. Rev. 805 (1992); See also, North Haven Board of Education v. Bell, 456 U.S. 512, 526-27 (1982) (noting "authoritative" status of the remarks of the sponsor of a bill).

342 The National Contingency Plan (NCP) is an overall blueprint for how cleanups should be conducted. See, 42 U.S.C. §9605 and 40 CFR 300 et. seq.; Daigle v. Shell Oil Co., 972 F.2d 1527 (10th Cir. 1992)
that the costs incurred were "not inconsistent with the National Contingency Plan." However, a private party claiming "response costs" has the burden of proving the expenses were "consistent" with the NCP.

If a private party can recover response costs that are "consistent with the NCP," the first question must be is medical monitoring a response cost? However, "response cost" is not defined in CERCLA's definitional section. There is a definition of "response," which provides that:

The terms "respond" or "response" means remove, removal, remedy and remedial action; all such terms (including the terms "removal" and "remedial action") include enforcement activities related thereto.

The terms "remove," "removal," "remedy" and "remedial action" all have their specified CERCLA meanings:

(23) The terms "remove" or "removal" means the cleanup or removal of released hazardous substances from the environment, such actions as may be necessary taken in the event of the threat of release of hazardous substances into the environment, such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances, the disposal of removed material, or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare or to the environment, which may otherwise result from a release or threat of release. The term includes, in addition, without being limited to, security fencing or other measures to limit access, provision of alternative water supplies, temporary evacuation and housing of threatened individuals not otherwise provided for, action taken under


344 The question of consistency under the national contingency plan is a factual determination that "cannot be made on the basis of the pleadings but must await development of a factual record." See, Pinole Point Properties, Inc. v. Bethlehem Steel Corp., 596 F. Supp. 283, 290 (N.D. Cal. 1984).


section 9604(b) of this title, and any emergency assistance which may be provided under the Disaster Relief and Emergency Assistance Act (42 U.S.C. §5121 et seq.) [footnote omitted].

(24) The terms "remedy" or "remedial action" means those actions consistent with permanent remedy taken instead of or in addition to removal actions in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment. The term includes, but is not limited to, such actions at the location of the release as storage, confinement, perimeter protection using dikes, trenches, or ditches, clay cover, neutralization, cleanup of released hazardous substances or contaminated materials, recycling or reuse, diversion, destruction, segregation of reactive wastes, dredging or excavations, repair or replacement of leaking containers, collection of leachate and runoff, onsite treatment or incineration, provision of alternative water supplies, and any monitoring reasonably required to assure that such actions protect the public health and welfare and the environment. The term includes the costs of permanent relocation of residents and businesses and community facilities where the President determines that, alone or in combination with other measures, such relocation is more cost-effective than and environmentally preferable to the transportation, storage, treatment, destruction, or secure disposition offsite of hazardous substances, or may otherwise be necessary to protect the public health or welfare; the term includes offsite transport and offsite storage, treatment, destruction, or secure disposition of hazardous substances and associated contaminated materials.

The total impact of all of the above definitions is that a response cost is a cost incurred in responding to a release or threatened release of toxic or hazardous substances. This may be in the nature of an immediate reaction which is called a removal action or a long term cleanup which is called a remedial action. Since a "removal action" includes actions that "may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances," the definition of response costs could include medical monitoring for exposed individuals if the purpose of the monitoring was to "monitor, assess, and evaluate the release or threat of release of hazardous substances."
substances." However, if the purpose of the monitoring is to protect the health of any particular individual it will not be a covered "response cost."

The Agency for Toxic Substances and Disease Registry

Private response costs are not the only option for providing at least some of the services that are traditionally considered to be medical monitoring. Section 104(i) of CERCLA\textsuperscript{347} establishes the Agency for Toxic Substances and Disease Registry (ATSDR)\textsuperscript{348}. The 1986 SARA Amendments\textsuperscript{349} granted ATSDR a complicated scheme of functions relating to the assessment of health effects of actual and threatened hazardous substance releases.\textsuperscript{350} For example, ATSDR is required to conduct formal health assessments for every NPL facility.\textsuperscript{351} Additionally ATSDR is authorized to conduct formal health assessments on other sites if provided with information from individuals or

\textsuperscript{347} 42 U.S.C. § 9604(i).

\textsuperscript{348} The medical monitoring functions under RCRA and CERCLA are the same, although the route of getting to the monitoring is different.

\textsuperscript{349} Now Codified at 42 U.S.C. 9604(i).

\textsuperscript{350} See generally, Susan M. Cooke, The Law of Hazardous Waste, Management, Cleanup, Liability and Litigation, 13.01[4][d][vii] (1992) (overview of ATSDR health assessment functions under 104(i) as amended by SARA) and Ambrogi v. Gould, 750 F. Supp. 1233 (M.D. Pa. 1990) ("To remedy the perceived inadequacies of the 1980 enactment, Congress created an expanded role for the Agency for Toxic Substances and Disease Registry ("ATSDR") to provide medical examinations and testing of exposed individuals including "tissue sampling, chromosomal testing, epidemiological studies, or any other assistance appropriate under the circumstances."").

\textsuperscript{351} 42 U.S.C. § 9604(i)(6)(A). NPL stands for "National Priorities List", a list of all "known releases or threatened releases throughout the United States" which is used for the assigning the priority for remedial actions. See, 42 U.S.C. § 9605(a)(8)(B).
physicians regarding human contact with released hazardous materials.\textsuperscript{352} These "physicians and individuals" may then petition the ATSDR to perform a health assessment. ATSDR is required to provide a written explanation of why an assessment is not appropriate if they deny the request.\textsuperscript{353}

In performing health assessments ATSDR considers a variety of factors that indicate the degree of risk to human health.\textsuperscript{354} Depending on the results of the health assessment, ATSDR is empowered to, among other things, conduct pilot epidemiologic studies\textsuperscript{355} and establish a registry of exposed persons.\textsuperscript{356} In the case of a serious health risk ATSDR may establish a long-term "health surveillance program." This can include "periodic medical testing" and a treatment referral mechanism for persons who are screened positive.\textsuperscript{357}

This appears to be an excellent solution from a medical and scientific sense, but it suffers from at least two practical defects. The first is that the ATSDR is still getting "geared up" for the massive task of surveying all of the NPL sites and it has more work to do than it has resources to do it with.\textsuperscript{358} The second is that neither the plaintiffs nor their attorneys

\textsuperscript{352} 42 U.S.C. § 9604(i)(6)(B).
\textsuperscript{353} Id.
\textsuperscript{354} 42 U.S.C. § 9604(i)(6)(F).
\textsuperscript{355} 42 U.S.C. § 9604(i)(7).
\textsuperscript{356} 42 U.S.C. § 9604(i)(8).
\textsuperscript{357} 42 U.S.C. § 9604(i)(8).
\textsuperscript{358} BNA Staff, Hazardous Substances, Statutory Deadline Blamed for Inadequacy (cont)
can get a portion of the money that the ATSDR spends, nor can they direct the ATSDR in their work. However, ATSDR's findings and reports are available to plaintiffs and their lawyers in any tort suits filed regarding injuries from the contamination.

CERCLA Medical Monitoring In Court

The courts are split on the question of medical monitoring costs being a element of proper private response costs under CERCLA. Some courts say absolutely not, while others say perhaps, in the right circumstances. The leading cases that take the position that it may be possible to recover medical monitoring expenses as "response costs" under CERCLA are all District

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Although to the extent that the plaintiffs attorneys played a roll in the decision to grant the monitoring by ATSDR, they might be able to make a claim for fees as a response cost. It is something of an article of faith among toxic tort defense lawyers (although seldom mentioned in the literature) that the real reason plaintiffs want medical monitoring as interim relief is to provide money to pay the experts in the companion toxic tort suit.


And accordingly denying motions for summary judgement or dismissal for failure to state a claim.
Court cases. The only Circuit Court of Appeals decision on the question held that medical monitoring expenses are not a proper "response cost" when they are claimed by a private party.362

There is no recorded case where a court has actually awarded medical monitoring expenses as an element of "response costs" under CERCLA. Instead, the issue has always been presented by a motion to dismiss or for summary judgement. Accordingly, the court has had to decide only if there is any possible set of facts from the allegations in the pleadings that might allow the award, and not if these facts actually do support such an award.363

For example the court in Brewer v. Ravan,364 ruled that "the Court cannot say that it appears beyond doubt that plaintiffs can prove no set of facts in support of their CERCLA claim." Similarly, in Jones v. Inmont Corp.,365 the court said "in light of the present procedural posture of the case, we cannot say as a matter of law that the plaintiffs are not so entitled." Though this is far from a ringing endorsement for the plaintiff's claims it was enough to defeat the summary judgment motion.366

The basis for considering the award of medical monitoring expenses as "response costs" lies in the extremely broad definition of response costs

366 Or as William Shakespeare observed in Romeo and Juliet "Tis neither deep as a well nor as wide as a church door, but 'tis enough...."
under CERCLA. Though no reported decision has awarded medical monitoring expenses as a response cost under CERCLA, several decisions have left the door open to do so. The claimant will have to establish that the monitoring is needed to assess the extent of the contamination or for another valid public health purpose. He will also have to show that the testing is "consistent with the National Contingency Plan." Consistency with the NCP is a factual question. The purpose of the NCP is to insure that cleanups are conducted in an efficient and cost effective manner. Therefore, it is unlikely that a court would ever approve a claim for medical monitoring expenses that duplicated services being provided by the Agency for Toxic Substance Disease Research.

There is no doubt that medical monitoring that is purely private in nature (that is testing for which the sole purpose of is to safeguard the


368 For example the court in Brewer held "To the extent that plaintiffs seek to recover the cost of medical testing and screening conducted to assess the effect of the release or discharge on public health or to identify potential public health problems presented by the release, however, they present a cognizable claim under section 9607(a)."


health of a specific person) cannot be recovered under CERCLA.372 There is also no doubt that the ATSDR has broad power and discretion to conduct monitoring of the communities affected by the release of hazardous substances.373 However, some commentators question whether the ATSDR has the resources or will to carry out the task it has been given.374 The sole remaining question is can medical monitoring expenses incurred by a private party ever be a proper response cost under CERCLA. A number of courts have answered no to this question.375 The reasoning of these courts is instructive and persuasive.

The key point to these courts was that "when Congress wanted to provide for medical care and testing, it knew how do so in explicit language" (as is shown by the sections of the law that established the ATSDR).376 These courts felt that the case against medical monitoring was further strengthened by the legislative history of CERCLA. The remarks of Senator Jennings Randolph

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in a comment on the final compromise bill that became CERCLA, are frequently cited. There the senator said "we have deleted the federal cause of action for medical expenses or property or income." The courts then noted that the provisions which deal with "monitoring" in §104 of CERCLA relate to "removal" actions under §107 and are limited by additional language which prevents them from having wide application. The Tenth Circuit in Daigle v. United States ruled that "the 'monitor[ing]' allowed for under the 'removal action' definition relates under the plain statutory language only to an evaluation of the extent of a 'release or threat of release of hazardous substances.'" The court then decided that the "remedial action" definition expressly focused only on actions necessary to "prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment." The court said this did not include long term medical monitoring.

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379 42 U.S.C. § 9607

380 972 F.2d 1527 (10th Cir. 1992).

381 42 U.S.C. 9601(23).

382 Id. 9601(24); Daigle, supra.
The line of cases beginning with a magistrate's decision in *Chaplin v. Exxon*\(^{383}\) and running through the Tenth Circuit's decision in *Daigle v. United States*\(^{384}\) all stand on the idea that the general provision for prevention or mitigation of "damage to public health or welfare" must be narrowly interpreted. This is consistent with the specific examples of "removal costs" set forth in the definition.\(^{385}\) These courts relied on the fact that the statutory definitions of each of these words do not contain any references whatsoever to medical expenses of any kind. They also found that these sections do not support any inferences that such expenses are recoverable response costs under CERCLA. Instead these courts interpreted the definitions as contemplating only the cleanup of toxic substances from the environment.

For example the *Ambrogii*\(^{386}\) court said:

Quite simply, we find it difficult to understand how future medical testing and monitoring of persons who were exposed to contaminated well water prior to the remedial measures currently underway will do anything to "monitor, assess, [or] evaluate a release" of contamination from the site" as a partial explanation for its order dismissing the plaintiff's claim for medical monitoring.

Similarly the Tenth Circuit in *Daigle*\(^{387}\) said:

Longterm health monitoring of the sort requested by Plaintiffs- "to assist plaintiffs and class members in the prevention or early

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384 \*Daigle, Supra.*


387 *Daigle v. Shell Oil Co.,* 972 F.2d 1527 (10th Cir. 1992).
detection and treatment of chronic disease," . . . clearly has nothing to do with preventing contact between a "release or threatened release" and the public." The release has already occurred.

The key to the courts' negative conclusion concerning the recovery of medical monitoring cost under CERCLA is that what the plaintiffs where really requesting was future medical expenses. Though perhaps needed to protect the health of an individual, this is not monitoring or assessment to determine the health or exposure of a community. Basically, these courts thought that the plaintiffs were using "medical monitoring" in its medical\textsuperscript{388} or tort law\textsuperscript{389} sense, and not as it was meant by the drafters of CERCLA.\textsuperscript{390}

The final answer to the question of can medical monitoring expenses ever be a proper response cost under CERCLA is not known, and it is unlikely to be known in the foreseeable future. Even if the issue were to reach the United States Supreme Court, a decision there, unless it was cast in very broad terms, might not completely resolve the question. This is because the area is very fact specific and even when (as in Daigle or Coburn) judges make broad rulings, the justification for these rulings rests on narrow factual distinctions. For example, in making its ruling in Daigle the court referred to "Long-term health monitoring of the sort requested by Plaintiffs" as not


\textsuperscript{390} Daigle, supra; See also, Walter Wheeler Cook, Substance and Procedure in the Conflict of Laws, 42 Yale L.J. 333, 337 (1933).
being recoverable, and cited to the amended complaint. This reflects the caution with which the courts have approached this issue. The rulings are not yes or no, rather they are perhaps yes but not now, not here, not there and perhaps not ever.

The right set of facts to support medical monitoring expenses as a CERCLA response cost may be out there, but it would need to involve a substance about which very little is known, so that testing is needed to determine how much of a risk the substance presents to the population at large. Next ATSDR would have to decline to study it. If ATSDR is studying the issue, a competing private study would be unnecessary and wasteful and therefore not "consistent with the NCP," and private parties can recover response cost only when they are "consistent with the NCP." Medical monitoring trusts will also appear in settlements as long as there are other viable claims that are also involved in the litigation. These settlements will involve all of the claims, both CERCLA and common law based.

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392 This might well take the form of "this is a worthwhile site for a study," but we have no funds with which to perform one."
393 42 U.S.C. §9605
394 See, In Re Agent Orange Products Liability Litigation, 587 F. Supp. 740 (E.D. N.Y. 1984); In Re Fernald Litigation, No. C-1-85-0149 (S.D. Ohio Sept. 29, 1990) (Order Approving $73,000,000.00 settlement after summary jury trial indicated problems with the government's case).
CHAPTER 6
FTCA ISSUES

Issues specific to the Federal Tort Claims Act (FTCA) in the area of the government's liability for damages from toxic torts revolve around the concept of sovereign immunity. Sovereign immunity in this context means that the sovereign cannot be sued unless it has consented to be sued. The doctrine of sovereign immunity began with the law of England, where the King was immune from suit in his own courts. This was frequently, if not completely accurately, stated in terms that "the King can do no wrong."

When the American colonies separated from the British Empire they did away with the king, but they kept the doctrine of sovereign immunity and applied it to the actions of the new governments they established. An individual injured due to the negligence of the government or a government employee had no remedy in the courts. The only possibility of compensation

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395 Here the United States government.


397 See, United States v. Sherwood, 312 U.S. 584 (1941).


400 The injured party could sue the individual government employee, but that was unlikely to result in more that moral satisfaction, as the average government employee was "a defendant of doubtful financial resources." See Lester S. Jayson, Handling Federal Tort Claims § 52 (1977).
was to request a private relief bill through the Congress.401 This was the law until the Federal Tort Claims Act (FTCA) was passed in 1946.402

The passage of the FTCA did not end the doctrine of sovereign immunity, but only modified and limited it. This is because the FTCA allows suits against the United States only under certain limited circumstances, and continues to bar those that do not fit within its requirements.403 Waivers of sovereign immunity are construed strictly and narrowly.404 Furthermore, it is a question of Federal rather than state law that determines whether a cause of action is excluded from the FTCA.405 A waiver of sovereign immunity that the plaintiff's claim fits within is a prerequisite to jurisdiction under the FTCA.406

The basic structure of the FTCA is that within the scope of the limited waiver of sovereign immunity, state law applies to the United States as if it were a private individual. The pertinent portion of the act407 reads as follows:

Subject to the provisions of chapter 171 of this title, the district courts, together with the United States District Court for the District of the Canal Zone, and the District Court of the Virgin Islands, shall have exclusive jurisdiction of civil actions on

407 Id.
claims against the United States, for money damages, accruing on and after January 1, 1945, for injury or loss of property, or personal injury or death caused by the negligent or wrongful act or omission of any employee of the Government while acting within the scope of his office or employment, under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred.

The key phrases are "caused by the negligent or wrongful act or omission" and "under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred." 408 The limitation of actions to those that are brought because of the "negligent or wrongful act or omission" of a government employee has been interpreted to bar suits that sound in any other theory of liability except negligence. For example, neither suits based on strict liability nor those based on a theory of implied or expressed warranty are allowed. 409 Similarly, suits seeking damages that are equitable in nature are not generally allowed. 410

408 Although there are other issues beyond the scope of this article which effect the waiver of sovereign immunity, chief among which is the discretionary function exception. For an excellent discussion of the discretionary function exception see David Fishbank and Gail Kilefer, "The Discretionary Function Exception to the Federal Tort Claims Act: Dalehite to Varig to Berkivitz", 25 Idaho L. Rev. 291 (1988-89).

409 Dalehite v. United States, 346 U.S. 15 (1952); Larid v. Nelms, 406 U.S. 797 (1972); Thompson v. United States, 592 F.2d 1104 (9th Cir. 1979).

If the suit is based on a cause of action that is outside the scope of the waiver of sovereign immunity, the court is without subject matter jurisdiction to hear the case. If a portion of the case requests damages that are beyond that waiver, the court is without jurisdiction to hear that portion of the case.411 In analyzing claims for "non impact damages"412 made against the United States, the first question that must be asked is whether the law of the state where the injury allegedly occurred413 allows these damages to be claimed? This is because the FTCA applies state law to the United States as if it were a private person.414 If the law that the state would apply415 allows the recovery of these damages then one can go to the

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declaratory relief was allowed in the course of class action litigation involving an aircraft accident).

411 Dalehite, supra, Gibson v. United States, 457 F.2d 1391 (3rd Cir. 1972).

412 Increased risk of disease, fear of disease and medical monitoring.


414 There are some uniquely Federal procedural requirements that the must be complied with in that having filed an administrative claim for a "sum certain" is a prerequisite to the District Court having jurisdiction to hear the suit. 28 U.S.C. 2672.

415 Which will usually but not always be its own, as some choice of law rules may apply the law of the place of negligence and not the place of injury if they are different. For example this could occur when an airplane is negligently repaired in state X, which causes it to crash and cause injury in state Y, while the injured persons were citizens of state Z. Venue might lie in either state X, Y, or Z. See, 28 U.S.C. 1402. Choice of law would depend on where the court decides the "act or omission" occurred (X or Y). See, Forest v. United States, 539 F. Supp. 171 (D.C. Mont. 1982). Choice of law for damages might be the place of the act or omission, the place of injury or (cont)
question of on what basis does the state allow awards for these damages. On
the other hand, if the state would not allow these damages to be claimed
against a private party, then there is no cause of action under the FTCA and
the analysis ends.416

If the law of the state in question allows damages of the sort in
question and the theory upon which the damages will be awarded is one that
sounds in negligence, the damage claim against the United States can go
forward on the merits. However, if the courts of the state in question base
their authority to award the damages in question on their general equitable
powers, that portion of a suit that seeks such damages would be beyond the
scope of the waiver of sovereign immunity contained in the FTCA. If there is
no waiver of sovereign immunity, the court is without jurisdiction to even
hear that portion of the claim.417 If there is no controlling state
precedent available on the point the Federal Court must make its best Erie418
guess about how the state's courts would decide the issue.419

It is primarily in the area of medical monitoring that questions of the
scope of the waiver of sovereign immunity under the FTCA have arisen, as there
is little doubt or controversy about the nature (as opposed to the

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417 Moon v. Takisaki, 501 F.2d 389, 390 (9th Cir. 1974).

418 See, Erie R.R. Co. v. Tompkins, 304 U.S. 64(1938).

419 In Re Paoli Railroad Yard PCB Litigation, 916 F.2d 829, (3d Cir. 1990).
requirements of) claims for emotional distress or enhanced risk.\textsuperscript{420} There have been two Federal District Court cases where the plaintiffs have sought medical monitoring under the Federal Tort Claims Act. Both are unreported decisions.\textsuperscript{421} In one, the court found that the damages sought were equitable in nature, and therefore not available to the plaintiff.\textsuperscript{422} In the other the court found that a claim for medical monitoring was a claim for "money damages." Therefore the claim was recoverable under the FTCA.\textsuperscript{423}

In \textit{Burke v. United States},\textsuperscript{424} the magistrate ruled that since California had not recognized either a cause of action for medical monitoring or the right to recover medical monitoring as an element of damages under an existing cause of action, the only way that such damages could be awarded was based on the court's general equitable power. He then ruled (relying on \textit{Moon v.}

\begin{itemize}
\item \textsuperscript{420} But See the case of \textit{Laswell v. Brown}, 524 F. Supp. 847 (W.D. Mo. 1981), aff'd 683 F.2d 261 (8th Cir. 1982), cert. denied 459 U.S. 1210 (1983) where it was stated that there was no claim for increased risk of future injury without present injury under the FTCA. There was no discussion as to whether or not this was based on the fact that the law of Missouri did support this or some ground particular to actions under the FTCA. However, it makes more sense for this ruling to have been based on the court's impression of Missouri law.
\item \textsuperscript{421} There is a reported decision from the District of Minnesota, \textit{Werlein v. United States}, 746 F.Supp. 887 (D. Minn. 1990) where the plaintiffs claimed medical monitoring under both CERCLA and Minnesota Common law. The court found that medical monitoring could not be (on the facts before it) recovered under CERCLA, but that it could be claimed as an element of damages at law under the common law of Minnesota. However the court (perhaps because of the presence of non federal codefendants) did not address the issue of the recoverability of medical monitoring under the FTCA).
\item \textsuperscript{422} \textit{Burke v. United States}, No CV F-89-455 DLB (E.D. Cal. April 15, 1991).
\item \textsuperscript{424} No CV F-89-455 DLB (E.D. Cal. April 15, 1991).
\end{itemize}
Takisake\textsuperscript{425} that since the relief requested was equitable in nature\textsuperscript{426} and the United States had not waived its sovereign immunity as to equitable relief, the plaintiff did not have a valid cause of action against the United States. Summary judgement was accordingly granted in favor of the United States.

The opposite result was reached in \textit{Redland Soccer Club Inc., et al. v. United States},\textsuperscript{427} a case decided under Pennsylvania law. The United States moved for summary judgement and the court ruled that legal damages were being sought since the plaintiff was seeking a specified amount of money.\textsuperscript{428} The court accordingly found that the plaintiff's demand was within the scope of the FTCA's waiver of sovereign immunity. The court relied on \textit{Villari v. Terminix International Inc.}\textsuperscript{429} in ruling that medical monitoring is a type of legal damages under Pennsylvania law.\textsuperscript{430}

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{425} 502 F.2d 389, 390 (9th Cir. 1974).
\item \textsuperscript{426} Though not cited by the Magistrate, this is in accord with the 1987 decision in \textit{Barth v. Firestone Tire and Rubber Company}, 661 F. Supp. 193 (N.D. Cal. 1987) that medical monitoring in California is recognized but only as an equitable remedy.
\item \textsuperscript{427} 1:CV-90-1072 (M.D. Pa. Feb. 12, 1992).
\item \textsuperscript{428} Based on a plan supported by expert testimony.
\item \textsuperscript{429} 663 F. Supp. 727 (E.D. Pa. 1977) where the court allowed a claim for medical monitoring to go forward and treated it as a claim for legal damages in the nature of future medical expenses.
\item \textsuperscript{430} At least on these facts, where the plaintiff presented expert testimony as to the amount, kind and expense of the medical monitoring requested.
\end{enumerate}
\end{footnotesize}
As stated above, this is in accord with the holding of the Federal District Court for the Eastern District of Pennsylvania in *Villari*, and some Pennsylvania trial court cases that held medical monitoring costs are legal damages. It is contrary to other Pennsylvania state trial court cases that have held medical monitoring to be an equitable remedy.

There are no uniquely Federal aspects to claims for emotional distress without present injury or for enhanced risk claims. This is so even if the claim of enhanced risk is asserted without a claim of present injury, or if the chance of the condition the plaintiff is at risk for occurring is less than fifty percent. The obstacles to a plaintiff's recovery of these damages are based entirely on state law applied to the United States by operation of the FTCA.

However, when the plaintiff claims damages for medical monitoring, he must meet the requirements of both the state law that applies, and those

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431 *Supra.*


434 *See, Molzof v. United States.* -- U.S. --, 112 S.Ct. 711 (1992) where the court refused to make a determination of what damages are punitive as a matter of Federal law and remanded the case back to the trial court to determine if the damages in question were allowed as a matter of state law. *See also,* Waffen v. United States, 799 F.2d 911 (4th Cir 1986) and Hurley v. United States, 923 F.2d 1091 (4th Cir 1990) where the Fourth Circuit in Waffen first allowed a claim for loss of a chance (the inverse of increased risk) and then disallowed it, based on an intervening decision of the Maryland Court of Appeals that changed state law.

necessary to find a waiver of sovereign immunity under the FTCA.\footnote{See, Burke v. United States, supra.}

Accordingly, the answer to whether or not a plaintiff can recover medical monitoring expenses from the United States will turn on whether or not the state in question allows such damages, as well as on the basis that the courts of the state have used as their authority to award those damages.\footnote{See, Burke v. United States and Redland Soccer Club v. United States, both supra.} It may even turn on the manner in which the plaintiff's counsel chooses to plead the claim, or on the extent that the trial judge chooses to rescue the attorney from his inartful pleading.\footnote{See, Villari v. Terminix Intern. Inc., 677 F. Supp. 338 (E.D. Pa. 1987) where the court chose to treat a request for "a constructive trust sufficient to pay the cost of medical detection and medical monitoring" as a demand for legal damages. Note however that in an FTCA action the administrative claim and sum certain requirements might not leave a court the same flexibility to rescue a claimants attorney from his missteps.}

It should be noted that the United States Supreme Court in \textit{Molzof v. United States}\footnote{\textit{Molzof v. United States. -- U.S. --, 112 S.Ct. 711 (1992).} chose to interpret the exclusion of punitive damages from FTCA coverage narrowly. This case involved a veteran who had been left in a comatose state because of medical malpractice. The government claimed that damages for the loss of enjoyment of life by a comatose patient were "punitive in nature." The argument was that since the plaintiff was in a coma, he did not know that he was not enjoying life. The government's reasoning was that damages could not "compensate" him for an injury he unaware of, and therefore they must be "punitive." The court rejected the government's claim
and remanded the case to the trial court to determine if the damages in question could be recovered under state law. This may indicate that the court is hostile to attempts to use what it takes to be as a shield to protect essential governmental functions as a defense to what it saw as a run of the mill negligence case. On the other hand, it may simply indicate that this was a bad set of facts for the government.
CHAPTER 7

CONCLUSION

A Changing World

The complexity of toxic tort litigation is a reflection of the increased complexity of modern society and its technology. This technology has given humans the ability to accomplish things that a century ago or even a few decades ago would have been thought to be impossible. It was only in 1903\(^4^4^0\) that man first flew in a heavier than air machine, 1947 when man first traveled faster than the speed of sound,\(^4^4^1\) and 1961 when man first escaped the limits of the earth's atmosphere and gravitational field.\(^4^4^2\)

It was not until this century that the first effective antibiotic drugs were developed, and only in the second half of the century that they became commonly used.\(^4^4^3\) It has been only in the last 20 years that we have come to understand the effects of the by-products, waste streams and unintended side effects of the processes that make all of this and the remainder of modern technology possible. The unintended and probably uncontemplated price we pay for this technology is the release of toxic by-products into the environment. This in turn results in injuries to those who have the misfortune to become exposed to them.\(^4^4^4\)

\(^4^4^0\) Tom D. Crouch, The Bishop's Boys: A Life of Wilbur and Orvile Wright (1989).


\(^4^4^2\) Id.

\(^4^4^3\) John Parascondola, ed. The History of Antibiotics (1980).

\(^4^4^4\) Wendell B. Alcorn, Jr. Liability Theories for Toxic Torts, 3 Nat. continued on next page
The System Responds

These new forms of injury, caused by agents that cannot be detected except with the most sensitive of scientific instruments, and that may take years or generations to appear, have tested the ability of the common law tort system to respond. Some commentators have called for major changes, wholesale reform or even abandonment of the tort system. The system however has responded to the challenge in numerous and sometimes inconsistent ways. This is to be expected of a common law doctrine that is made in hundreds of separate courts in over 50 jurisdictions.

A New Definition of Injury

A major part of this response has been an expansion in the definition of injury. This has in turn modified the damages a plaintiff can recover. Under the traditional common law there could be no recovery in tort without physical

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Resources and Env't 3 (1988)("The term "toxic tort" is a product - albeit an undesirable one - of modern industrialization. In broad terms, it encompasses any wrongful injury resulting from exposure to one or more hazardous substances"). In Tiller v. Atlantic Coast Line Railroad Co., 318 U.S. 54 (1943) Justice Black described this situation as "the human overhead," which he observed was "an inevitable part of the cost - to someone - of doing industrialized business."


447 Allowing for 50 states, the District of Columbia and the Federal Courts as both interpreters of state law under Erie and in the uniquely Federal causes of action and the territorial courts.
contact that caused bodily harm. Assault was the only exception because assault was an injury to the plaintiff's right to be free from fear (apprehension) of bodily harm and not an injury to the plaintiff himself.

As society and technology have changed, the law has changed with them. Nonimpact damages are a result of that change. Medical monitoring, fear of future disease and claims for enhanced risk of future disease are not separate intellectual doctrines, but are merely way stations in a continuous stream that has been set in motion by the changes that have occurred in the second half of the 20th century.

When injuries were limited to those that could be seen, and medicine was limited to setting broken bones, stopping bleeding and applying leeches, there was no need for regular visits to a physician to see if one was developing signs of disease. However, in today's world medical monitoring to detect signs of cancer and allow for early treatment can be a lifesaving practice. Neither Lord Coke nor William Prosser encountered the situation where 100 people were exposed to an invisible but potent agent which, will

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over the course of 20 years cause one of those persons to suffer from a deadly
disease. They did not have to deal with diseases that might be successfully
treated when detected early enough.451

The idea of medical monitoring damages developed in response to this type
of situation. It is the first step in the line of nonimpact damages. Medical
monitoring expenses are only a small step from the future medical expenses
that are a regular and accepted part of all personal injury litigation.452
They are basically future medical expenses allowed for a different type of
invisible and contingent injury. The courts have disagreed on how different
and how contingent that injury can be,453 but these are differences in degree
rather than kind.

The evidence required as a foundation to award medical monitoring
expenses is exposure, risk of future injury from the exposure, and sufficient
scientific fact to show that the proposed monitoring will have a beneficial

451 For the purpose of this discussion, I am assuming that this is a disease
(like lung or breast cancer) that indeed has both reliable tests for its
occurrence, and practical therapies for its detection. I am also assuming
that the increased survival rate is a factor of the early detection, and not
just as result of a longer period to follow the patient before his or her
death because of the early detection. See, Ronald E. Gots, Medical Monitoring
Following Chemical Exposures, For The Defense, Nov. 1992, at 22, 24; and
Myrton F. Beeller and Robert Sappenfield, Medical Monitoring, What it is, How

452 Charles T. McCormick, Handbook of the Law of Damages, § 90 (1935);
Hagerty v. L & L Marine Services, Inc., 788 F.2d 315, 319, modified, 797 F.2d
256 (5th Cir. 1986).

453 With answers that have ranged from very to not at all. Ayers v. Jackson
Township, 525 A.2d 287 at 312 (N.J.1987); Ball v. Joy Technologies, Inc., 958
F.2d 36(4th Cir. 1991).
Evidence of increased risk of disease, which might otherwise be inadmissible, would then be admissible for the limited purposes of showing the need for monitoring. The measure of those damages is the expected cost of the necessary testing and examinations. This may be awarded as either a lump sum or in the form of a court supervised trust. The trust will pay the cost of monitoring and perhaps arrange for the information to be shared among public agencies and other interested persons. Although the lump sum may be easier to deal with in the case of a single plaintiff, most courts and commentators agree that a trust or fund does a better job of protecting public health.

There remains a debate about whether recovery for medical monitoring is a legal or an equitable remedy. The reality is that it has features of both, depending on how the complaint is plead and the remedy is structured. Given the merger of law and equity, this is largely a moot point, except for the question of whether or not medical monitoring costs are within the scope of the waiver of sovereign immunity under the Federal Tort Claims Act.

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454 In Re Paoli Railroad Yard PCB Litigation, 916 F.2d 829 (3d Cir. 1990).
455 If the jurisdiction has rejected the doctrine of enhanced risk.
456 See, F.R.E. 105. The defendant could of course request a limiting instruction, but the wisdom of that approach widely debated as some believe it only highlights the evidence in the minds of the jury.
459 See, Chapt. 7, supra.
Medical monitoring, with some sort of trust type arrangement to insure that the award is really used to protect the health of the exposed individuals, was endorsed by the American Law Institute's study "Enterprise Responsibility for Personal Injury." However, the medical monitoring the ALI study advocates is not that which should be accomplished by a normal periodic medical examination, nor is it that which might be recommended by some of the fringe type of "clinical ecologists." Instead, the ALI study recommends:

"some sort of epidemiological investigation of where and when the disease actually manifests itself among the exposed groups. This work would serve both to inform the medical profession about which people are in real need of early treatment and to provide reassurance to people who turn out not to be at risk.

The report then makes it very clear that the authors favor some sort of controlled trust arrangement by adding:

We do not favor awarding damages under the label of "medical monitoring" and having the money paid directly to the plaintiffs to be spent on additional medical attention only if they are so inclined.

Although the personal injury bar may complain that this is "paternalism," it is a sound measure to both protect public health and preserve scarce resources. As the asbestos and Dalkon Shield cases demonstrate, the ability

462 Enterprise Responsibility, supra., 379.
of industry to pay is not unlimited. If those who take longer to develop diseases are to be compensated, it is necessary that the funds available to pay compensation be used efficiently. This will provide compensation to the greatest number of injured persons. The benefit to the plaintiff is a reduced burden of proof. The cost to the plaintiff is a limitation on damages to those sums necessary to provide the medical services required.

Much of the same evidence that supports medical monitoring is also necessary to support a claim for emotional distress caused by the fear of future injury. To recover for emotional distress from exposure to a hazardous substance, the plaintiff must prove that he has been exposed to the hazardous substance, that as a result of that exposure he has suffered emotional distress, and that the fear which causes his distress is "reasonable." In addition, the plaintiff may have to prove some form of physical impact or injury, depending on the rules of the jurisdiction.

Emotional distress due to fear of future disease is, in some ways, more of a conventional type of action than is medical monitoring, for it involves a real and definite (if invisible) injury. It also has the possibility of


464 Terry Morehead Dworkin, Fear of Disease and Delayed Manifestation Injuries: A Solution or a Pandora's Box" 53 Fordham L. Rev. 527 1984).

465 Id.

466 This can be contrasted to the tort of assault, where damages are presumed from the invasion of a protected interest to be left alone. Emotional distress (which may be caused by either intentional or negligent acts) is an injury from the defendant's actions, while assault is the actions themselves.
delivering a large cash verdict which tends to attract the attention of the attorneys for both plaintiffs and defendants.

The requirement that the plaintiff prove that his distress is "reasonable" is far less than an complete blessing to the defendant. On one hand, it provides a hurdle that the plaintiff must clear before he will be allowed to recover. On the other hand, the requirement to prove the reasonableness of the plaintiff's fear opens the door for a great deal of evidence about increased risk that would otherwise not be relevant because it does not support the proposition that the plaintiff will more likely then not get the disease. The evidence may be speculation, but if it is speculation by a Ph.D. or a M.D., a reasonable person may be frightened by it. The jury gets to hear it, and they are the arbiter of reasonableness. An interesting dilemma is to what extent is the defendant responsible for the actions of others (including the plaintiff's attorney or experts) in improperly adding to the plaintiff's fears?467

At the top of the pyramid of nonimpact damages is the chance of recovery for pure enhanced risk. It is at the top of the pyramid because it involves the greatest amount of money.468 It involves the most money because what is usually in issue is an increased risk of disabling or fatal diseases, frequently cancer.469 A plaintiff seeking damages for increased risk also

467 Michael Dore, supra. § 7.02[3].

468 This is sometimes referred to as "The Rule in Sutton's Case", in honor of the famous bank robber Wille Sutton who when asked why he robbed banks is alleged to have replied "that's where the money is."

faces the highest barriers to recovery. These barriers take the form of burdens of proof that in most jurisdictions require the plaintiff to show that he is more likely than not to develop the disease he is at risk for.470 However, in most cases the science is not available that will allow the plaintiff to meet this burden.

These barriers are there for a good reason, namely that what is being sought is compensation for an event that has not yet occurred, and, indeed may never occur. This is a long way from a traditional tort which only came into being when the victim suffered a harm.471 The conflict between traditional tort law and recovery for enhanced risk can be resolved with logic and intellectual consistency only by defining the chance of future harm as an injury itself.

The question of how to measure that harm remains, even if one defines the risk of future injury as a present harm. If the award is the full value of the potential harm,472 all of those who later develop the possible condition will be fully compensated. However, this will be done at the cost of overcompensating those who never develop the harm. On the other hand, if the


472 That is to say the full measure of damages that would be available if the plaintiff actually had the disease they are at risk for.
compensation is proportional, then those who do get sick are under compensated, and those who do not get sick are overcompensated. Both options result in a windfall to those who are fortunate enough to avoid the feared condition. The second option is unjust to those who are actually injured, and the first is unfair to the defendant who is forced to pay more than the true cost of his wrong. While some have commented that a little "over deterrence" can be good, overpayment of compensation can result in a socially inefficient allocation of resources by discouraging innovation and investment in new technologies.

The rule that the plaintiff must show that he will "more likely than not" suffer the injury that he is claiming for is an effective bar against either over or under compensation, at least in a macro or system wide sense. Though absolute certainty is never possible with future events, the "more likely than not" standard avoids excessive cost shifting. However, when

473 That is to say the damages for the injury are discounted for the probability of their occurrence, i.e., a $100.00 injury that is 50% likely to occur would result in a $50.00 award.


475 See, Dan Qualye, Now is the Time for Products Liability Reform, 4 Toxics L. Rep. (BNA) 1221 (1990); But see, Steven Angstreich, Now is the Time to End the Attack on Lawyers and Victims, 4 Toxics L. Rep. (BNA) 1432 (1990).

476 There will still be imperfections and individual injustices where the wrong person will be compensated or denied compensation, but on an overall level it should balance out.

this standard is combined with the so called "single action rule" and an early trigger on the statue of limitations, injustice and under compensation can result. This is because the statue of limitations requires that the plaintiff bring his lawsuit within a short time after discovering his injury, and at that time he will not be able to know the full extent of those injuries.

The most practical, logical and efficient way of dealing with this situation, which taken to its logical or illogical extreme results in a cause of action that is barred before it exists, is to modify the "single action rule." This would allow the plaintiff to bring an action for the disease he is at risk for if and when he actually develops the disease. Although some have criticized this approach on other grounds, it is a superior solution to weakening the standards for recovery of increased risk damages.

Deferring a suit over cancer or another serious disease until occurs has the great virtue of simplifying an already too complicated area of the law.

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"Recovery of damages for speculative or conjectural future consequences is not permitted. To meet the 'reasonably certain' standard, courts have generally required plaintiffs to prove that it is more likely than not ... that the projected consequence will occur."; Ayers v. Jackson Township, 461 A.2d at 187 (trial court) "To permit recovery for possible risk of injury or sickness raises the spectre of potential claims arising out of tortious conduct increasing in boundless proportion."

478 Which requires that all aspects of one incident be resolved in a single lawsuit.

479 Such as the difficulty of proof after passage of time and the possibility that the potential defendant may be insolvent or otherwise not available.

The case may still come down to a "battle of the experts," but at least they will be talking about what has happened, as opposed to what might happen. Additionally, the plaintiff has the option of filing an action for medical monitoring or emotional distress due to the fear of the future disease.481 Although both doctrines have their critics, and both can be and have been abused,482 they serve a valid purpose in insuring that the "human overhead" of the modern chemically dependent industrial society is properly and accurately allocated.

A Unified Theory?

The common thread running from medical monitoring through damages for fear of future disease to claims for increased risk of future disease is the attempt of the law of torts to adapt to new kinds of injuries. Exposure to toxic substances is injury and risk is injury.483 However, they are injuries that for reasons of both practicality and policy cannot be fully compensated in present terms or current dollars. That there are some cases where injury may go uncompensated is not a new concept in tort law. Professor Keeton has noted that "it does not lie within the power of any judicial system to remedy

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481 At least in those jurisdictions that have recognized them, see the discussion infra.


all human wrongs.*484 Mere exposure without physical effect is the part of the "human overhead" that is allocated to the individual as his share of "the cost of living in an organized society."485

To the extent that an individual exposed to toxic substances is forced to undergo medical testing and monitoring due to his exposure, he suffers a compensable injury. His remedy is a claim for medical monitoring expenses.486 The measure of his recovery is the expected cost of those procedures required for the protection of his health. This amount, though still subject to dispute and debate and differing opinions is something that the law is quite capable of valuing, more or less accurately.487

Likewise, if an exposed individual suffers damage and injury due to the emotional distress resulting from the knowledge of his exposure, he can recover for that distress. While this is not as easily valued as the cost of medical testing, it is still something that is well within the experience and ability of the courts to handle.488 While less precise in amount than medical monitoring expenses, damages for emotional distress still involve valuing events that have already happened.489 Therefore there is a factual

484 W. Page Keeton et al., supra., § 4, at 23 (5th ed. 1984).
488 Terry Morehead Dworkin, Fear of Disease and Delayed Manifestation Injuries: A Solution or a Pandora's Box" 53 Fordham L. Rev. 527 1984).
489 Although some of their consequences may yet be in the future.

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basis upon which to make an award.\footnote{490}{I.e., how distressed is this person, based on what we have heard about him.} The fear of fraud in the area of emotional distress has led to certain procedural requirements and increased burdens of proof such as the requirement of physical injury, but this is not an unexpected or unreasonable development.\footnote{491}{Id.; Payton v. Abott Labs, 437 N.E.2d 171 (Mass. 1982).}

What is going to happen in the future is the key question in claims for increased risk. It is a question that is beyond the ability of the courts to accurately answer. Because of that, the chance of a wrong answer which either grants compensation needlessly or erroneously denies it is very high. This large chance of error causes the hurdle of the burden of proof to be set so high that only the clearest and most convincing of cases can surmount it.

Exposure to a hazardous substance resulting in an increase in one's risk of getting a serious disease is an injury, but one that, in most cases, is beyond the ability of medicine, science or the courts to quantify. Furthermore, in the absence of physical harm simple exposure ought not be compensated, because it is too small, too uncertain and too widespread.\footnote{492}{W. Page Keeton et al., \textit{supra.} § 4, at 23 (5th ed. 1984); Gilliam v. Stewart, 291 So.2d 593 (Fla. 1974).}

As the likelihood of the possible harm increases, it may reach the point where it becomes more likely than not the disease in question will occur. The harm then becomes compensable. Fifty percent is admittedly an arbitrary figure (it might as well be 60\% or 40\%) but it is a reasonable enough figure, particularly when a later cause of action for the future disease is allowed if and when the disease occurs.
Nonimpact damages are how tort law has responded to new and differing mechanisms of injury. They serve the aims of society by allocating costs between those who benefit from the defendant's acts, and those that are the unintentional victims of it. If the limits of the waiver of sovereign immunity under the Federal Tort Claims Act prevent a victim who has been exposed to hazardous substances due to the negligent actions of the Federal government from recovering for his injuries, it defeats both the purpose of tort law and the intent of the FTCA. Accordingly, the statute should be changed to allow recovery of all compensatory damages available under the law of the state, whether their origins sound in equity or tort.